



NUMS

NATIONAL UNIVERSITY
OF MEDICAL SCIENCES

FACULTY HANDBOOK

Revised Version (2024)

TABLE OF CONTENT

CHAPTER	CHAPTER TITLE	PAGE #
I.	University and its Institutions	05
II.	University Boards & Committees	10
III.	Admission and Registration	22
IV.	Academics Policies & Guidelines	29
V.	Assessments & Examinations	67
VI.	Human Resource Policies	83
VII.	Administration Policies	110
VIII.	Quality Assurance Polices & Guidelines	133
IX.	Research & Development Polices	140
ANNEX-A	NUMS Admission Eligibility Criteria	170
ANNEX-B	NUMS Checklist for Development of Curriculum	176
ANNEX-C	Checklist Launching of PhD Masters/ Equivalent Programs	178
ANNEX-D	Template of Courses File	180
ANNEX-E	Conduct of PhD Program	181
ANNEX-F	Postgraduate (PG) Forms Downloadable Forms NUMS Website	182
ANNEX-G	End Semester Examination	183
ANNEX-H	Students Feedback Performa	184
ANNEX-I	Pay Schedule	185
ANNEX-J	Annual Appraisal Report Faculty	186
ANNEX-K	Updated List of Faculty Template	192
ANNEX-L	Summary for the Preparation of Self-Assessment Report	193

MESSAGE BY VICE-CHANCELLOR



It is an honour for me to head the National University of Medical Sciences (NUMS), which has already earned its place among the academia within a short span of its creation, the credit for which goes to senior management, the faculty and its staff who lived up to the huge task of building a national university through professionalism and an extraordinary commitment to achieve what it has in the past six years.

We can all take pride in our achievements in research, including our linkages with renowned international universities and the local pharmaceutical industry, which strengthen much-needed cooperation between academia and industry.

NUMS is destined to play a vanguard role in medical science by pursuing academics and research and completing mega projects like NUMS National Institute of Advanced Studies and Research (NIASR) and Medical City in the I-17 Sector of the Federal Capital. Once accomplished, these projects will further elevate NUMS's position at the national and international levels, besides inspiring others to emulate its example in academics and research.

NUMS is heavily responsible for ensuring the quality of its educational offerings and training

and innovation and pertinence in its research to serve the country and humanity at large. All those who join NUMS will be provided equal opportunities to grow as rounded individuals, taking merit and transparency as our guiding principles. We intend to instill, in our staff and students, a passion for being of service to humanity while embarking on a challenging but satisfying career.

With our diversely experienced faculty at NUMS' constituent and affiliated institutes, our students will be trained to pay attention to detail, with a view to becoming a reference point for healthcare-related studies in the country.

At NUMS, we work hard to push the boundaries of knowledge, investing time and energy in creating a learning environment in all our fields of study and research. We intend to rise to the expectations of our society.

LT GEN WASIM ALAMGIR, HI (M), (RETD)

CHAPTER I UNIVERSITY AND ITS INSTITUTIONS

1. Introduction

This handbook informs faculty about working conditions, benefits, academic issues and other policies affecting their employment. It should be read in conjunction with the University's Policies and Regulations. Faculty members are responsible for familiarizing themselves with the contents of this handbook and the university-wide policies and regulations. Information provided in this handbook may help them avoid unnecessary problems. Please do not hesitate to contact the Academic Directorate if you have any queries about this handbook. The provisions of the handbooks are not conditions of employment and may be modified, revoked, or changed by the University, with or without notice, at any time.

2. About NUMS

The National University of Medical Sciences (NUMS) was established as a Federal Public Sector University through an Act of Parliament on October 31st, 2015. The honorable President of Pakistan is the Chancellor of the University, and the Chief of the Army Staff is the Pro-Chancellor. NUMS was founded to promote and achieve excellence in advanced healthcare education, research and service delivery. The University is backed up by an extensive network of Military Hospitals, Single Specialty Institutes, and Medical and Nursing Colleges, making it the country's largest healthcare provider in terms of trajectory and patient volume. This research-led institution provides undergraduate and postgraduate education opportunities in diverse fields of Medicine, Dentistry, Nursing, Biological, Allied Health, & Veterinary Sciences with a necessary add-on, the Social Sciences.

NUMS envisages achieving set goals by adopting the best international standards and practices in medical education, training, research, and medical infrastructure modernization. In contrast, the benefits will have a broad-based socio-economic impact within the country and beyond. As it grows, NUMS has the potential to become a force multiplier by supporting other service providers in this field, developing partnerships with several advanced national and international universities, and industrial, governmental and community-based stakeholders through a national vision and a plan to establish a knowledge-based economy.

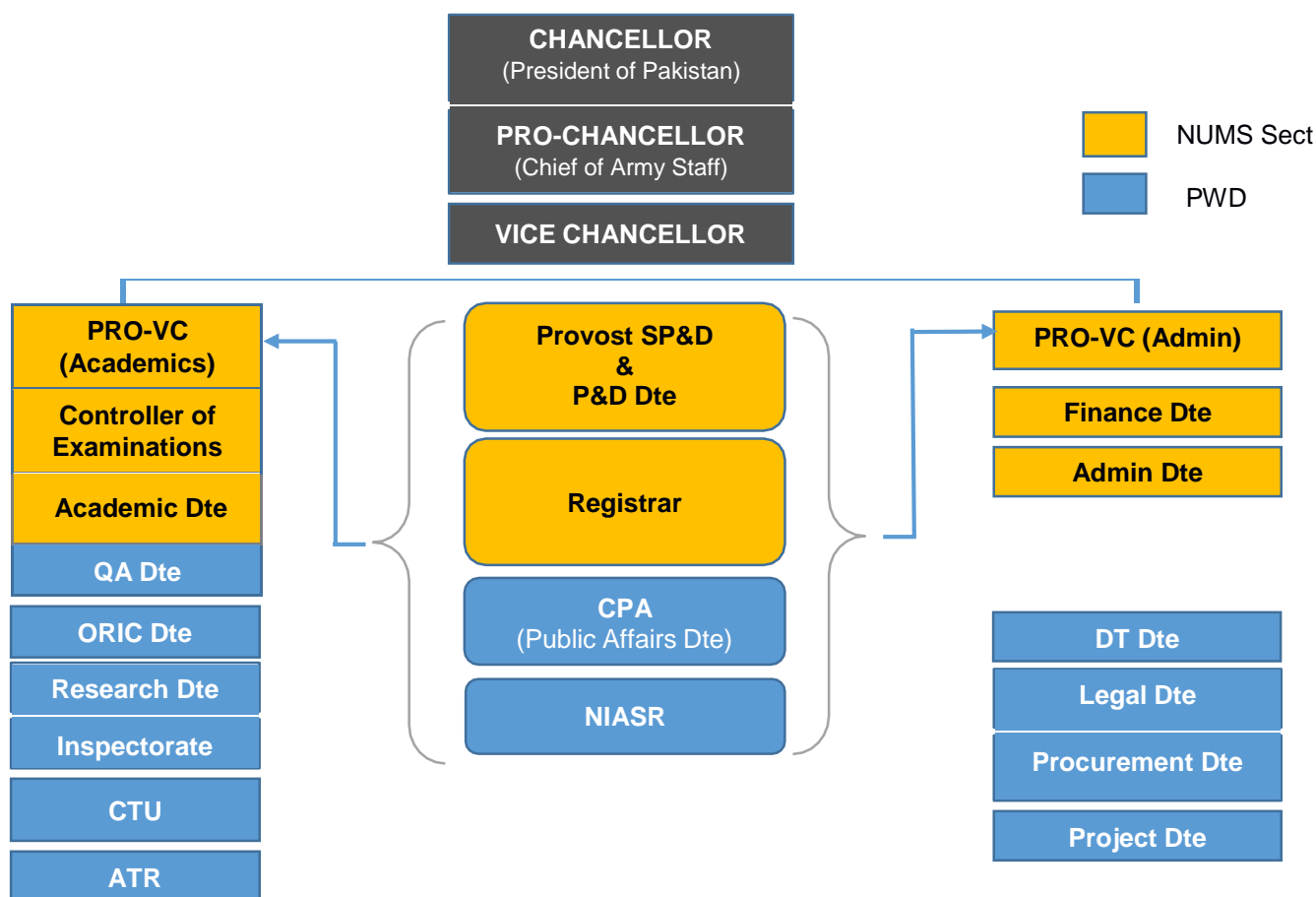
3. Vision of NUMS

The National University of Medical Sciences' vision is to improve the quality of life through education, research, innovation, and healthcare, thereby contributing to endeavors to make Pakistan and the world a better place to live.

4. Mission of NUMS

The University will endeavour to improve existing knowledge and practices in medical and allied life sciences, pure and applied, including biomedical engineering and technologies, veterinary, biogenetic, social, and behavioural sciences, through innovative and creative approaches to offer the best possible services to society and humanity.

5. Organogram



6. Directorates/ Offices

- Academics:** This directorate is responsible for academic programs, curriculum development, calendars, faculty development, academic domestic/overseas collaborations/ partnerships, academic reforms, internship/house job facilitation and student assessment/evaluation.
- Administration:** This directorate is responsible for personnel administration (conduct and discipline), operational (internal/external) coordination, logistics, procurements with inventory management, service acquisitions, property/asset management, maintenance work and security.
- Admission and Registration:** This directorate deals with admission policy, student admissions and registrations management, student documentation and record-keeping, student facilitation and degree distribution affairs.
- Digital Technologies:** Responsible for developing, implementing, maintaining, operating, monitoring, and upgrading a comprehensive end-to-end computer (automation) system so as to enable Nums to achieve the maximum level of a paperless integrated office work environment, record digitization, Nums website, digital library management, and IT-related capacity building of Nums employees.

- e. **Examination:** Responsible for all matters connected with the conduct of all examinations and coordination with constituent and affiliated colleges/institutions.
- f. **Finance:** Deals with fund management, financial management, budget management, investments, strategic financial planning, operation of official bank accounts, salary/expenditure disbursement and audit facilitation.
- g. **Human Resource:** It deals with the development and management of technical/professional human resources, the assessment of diverse HR needs, training and capacity building, a multi-level performance appraisal system, general personnel management, recruitments, deployments, and service record maintenance.
- h. **Internal Audit and Inspection:** Responsible for expenditure pre-audit/post-audit, external audit coordination, valuation/evaluation/revaluation, costing/value fixations, inspections, surveys, and assessments.
- i. **Legal Affairs:** Responsible for managing litigations, legal drafting/vetting and legal advice.
- j. **ORIC:** This directorate deals with the promotion/management of multidisciplinary scientific research, outdoor research collaborations/partnerships, multi-source generation of research funds from national and global channels and commercialization (including IPR-trade) of research achievements.
- k. **Planning and Development:** Responsible for preparation (including scheming and budgeting), execution, monitoring, evaluation and management of development projects (including project upgradations). Internally coordinated the development and implementation of strategic programs and projects. Strategic analysis with R&D-based visionary/futuristic planning and reforms in different operational and development regimes to increase institutional productivity and output of NUMS at all organizational levels.
- l. **Public Affairs:** It deals with the development and application of an institutional image-building system, media interaction management, university publication affairs, management of all official events, liaison with other organizations and institutions, etc.
- m. **Quality Assurance:** Deals with critical assessment and qualitative improvement/refinement/ optimization of academic/ educational standards (both input and output), certification/ accreditation management, an efficient student feedback system, and productive academic audits aimed at designing and implementing academic quality enhancement measures/methods.
- n. **Registrar Office:** The Office of the Registrar is committed to providing services to students, faculty, staff, and other constituencies through scheduling, admissions, registration, record keeping, matters pertaining to transcripts, degree verifications, and affiliation, and assisting the deans and other administrative offices in their service.
- o. **Student Affairs Office:** This Office is responsible for arranging various academic and co-curricular activities for students, which help them achieve their educational goals and personal development so that they can contribute positively to society.

7. Constituent College/ Institute

NUMS offers its standardized academic programs for the award of degrees at:

- a. Army Medical College (AM College), Rawalpindi
- b. Armed Forces Post Graduate Medical Institute (AFPGMI), Rawalpindi
- c. Army College of Veterinary Sciences, Sargodha
- d. NUMS Institute of Advanced Studies & Research (NIASR), Rawalpindi

8. Teaching and Training Institutions

NUMS has the following Postgraduate teaching and training hospitals and institutes:

- a. Armed Forces Institute of Cardiology
- b. Armed Forces Institute of Dentistry
- c. Armed Forces Institute of Mental Health
- d. Armed Forces Institute of Ophthalmology
- e. Armed Forces Institute of Pathology
- f. Armed Forces Institute of Radiology and Imaging
- g. Armed Forces Institute of Rehabilitation Medicine
- h. Armed Forces Institute of Transfusion
- i. Armed Forces Bone Marrow Transplant Centre
- j. Armed Forces Institute of Urology

9. Affiliated Colleges

At present, NUMS offers programs for the awarding of degrees at affiliated colleges in addition to its constituent colleges. Any other institution, whether constituent or affiliated, may offer these programs as specified by the University's competent authority from time to time.

MBBS	<ul style="list-style-type: none"> ▪ CMH Lahore Medical College & Institute of Dentistry in CMH Lahore ▪ CMH Multan Institute of Medical Sciences (CIMS), Multan Cantt ▪ Quetta Institute of Medical Sciences (QIMS), Quetta Cantt ▪ Wah Medical College (WMC), Wah Cantt ▪ HITEC Institute of Medical Sciences, Taxila Cantt ▪ Karachi Institute of Medical Sciences (KIMS), Malir Cantt ▪ CMH Institute of Medical Sciences (CIMS), Bahawalpur Cantt ▪ CMH Kharian Medical College, Kharian Cantt
BDS	<ul style="list-style-type: none"> ▪ CMH Lahore Medical College & Institute of Dentistry, Lahore Cantt ▪ Dental College HITEC- Institute of Medical Sciences, Taxila Cantt

	<ul style="list-style-type: none">▪ CMH Dental College, Multan Institute of Medical Sciences, Multan Cantt
Nursing	<ul style="list-style-type: none">▪ College of Nursing, CMH Kharian▪ Institute of Nursing, CMH Lahore Medical College, Lahore Cantt▪ College of Nursing, CMH Multan▪ College of Nursing, CMH Quetta▪ College of Nursing, CIMS Bwp
Associate Degree	<ul style="list-style-type: none">▪ Indus Hospital, Karachi▪ Wah Medical College, Wah Cantt.

CHAPTER II

UNIVERSITY BOARDS AND COMMITTEES

NUMS has constituted different boards and committees to ensure the smooth running of its academic programs.

1. Board of Governors (BOG)

The governance and control of the affairs of the University and the power to lay down the policies of the University shall vest in a Board of Governors and shall consist of:

- a. Pro-Chancellor who shall be ex-officio chairman of the Board of Governors
- b. Adjutant General, General Headquarters
- c. Surgeon General, Director General Medical Services (Inter-Services) Medical Directorate
- d. Vice-Chancellor
- e. Pro-Vice-Chancellor
- f. Secretary Ministry of Health Services, Regulations and Coordination Government of Pakistan (or a nominee not less than a Joint Secretary)
- g. Secretary, Ministry of Finance, Government of Pakistan (or a nominee not less than a Joint Secretary)
- h. Secretary Ministry of Defence (or a nominee not less than a Joint Secretary)
- i. Chairman, Higher Education Commission (or nominee not less than an Executive Director or Director General)
- j. President, Pakistan Medical and Dental Council (or a nominee not less than the Secretary)
- k. Chairperson, Pakistan Medical & Dental Commission
- l. Four persons from society at large are persons of distinction in the fields of administration, management, education, academics, law, accountancy, medicine, science and technology such that the appointment of these persons reflects a balance across the various fields.
 - 1) Provided that the special focus or affiliation of the University, to be declared in the manner prescribed, may be reflected in the number of persons of distinction in an area of expertise relevant to the University who are appointed to the Board of Governors
- m. One person from amongst the alumni of the University
- n. two persons from the academic community of the country, other than employees of the University, at the level of professor or principal of the college
- o. Three University Teachers
- p. Co-opted Members (on a required basis without voting rights)
- q. General Officers of General Headquarters as designated by the Chief of Army Staff
- r. Director General, Joint Staff Headquarters
- s. The registrar will be the Secretary of the Board of governors.

2. Syndicate

The Syndicate shall act as an advisory and an implementing body for the decisions of the Board of Governors on all matters relating to the conduct of examinations, revision and updating, of course, syllabi, quality of education and duration of all courses, including the conduct of postgraduate classes in specified disciplines.

Composition

- a. Vice-Chancellor - Chairman of the Syndicate
- b. Pro-Vice- Chancellor
- c. Deputy Surgeon General, Medical Directorate
- d. Director Generals
- e. Nominee from Higher Education Commission not less than Director General
- f. Principals' constituent or affiliated colleges
- g. Commandants of institutes or institutions, centers or hospitals, etc., as may be required
- h. Deans of Faculties of the University
- i. Three professors from different departments who are not members of the Board of Governors to be elected by the University Teachers following the procedure to be prescribed by the Board of Governors
- j. Directors as may be required
- k. Registrar
- l. Treasurer
- m. Controller of Examination

Terms of References

- a) Consider the annual report. The annual and revised budget estimates are submitted to the Board of Governors.
- b) Recommend allocation of training and research funds to colleges, institutes, centres, and hospitals.
- c) Transfer and accept transfer of movable property on behalf of the university;
- d) Enter into, verify, carry out and cancel contracts on behalf of the university.
- e) Proper books of account shall be kept for all sums of money received and expended by the university and its assets and liabilities.
- f) Invest any money belonging to the university, including any unapplied income in any of the securities described in section 20 of the Trusts Act, 1882 (II of 1882), or in the purchase of immovable property or such other manner as it may prescribe, with the like power of varying such investments.
- g) Receive and manage any property transferred and grants, bequests, trusts, gifts, donations, endowments, and other contributions to the university.
- h) Administer any funds placed at the disposal of the university for specified purposes.
- i) Provide the buildings, libraries, premises, furniture, apparatus, equipment, and other means required for carrying out the university's work.
- j) Establish and maintain residence halls and hostels or approve or license hostels or lodgings for students' residence.
- k) Recommend to the Board of Governors affiliation or disaffiliation of colleges.
- l) Recommend to the Board of Governors that educational institutions be admitted to the privileges of the university and that such privileges be withdrawn.
- m) Arrange for the inspection of colleges and departments.
- n) Institute Professorships, Associate Professorships, Assistant Professorships, Lectureships, and other teaching posts or to suspend or to abolish such posts

- o) Create, suspend or abolish such administrative or other posts as necessary.
- p) Prescribe the duties of officers, teachers and other university employees.
- q) Report to the Board of Governors on matters concerning which it has been asked to report
- r) Appoint members to various authorities according to the provisions of the Act.
- s) Propose drafts of Statutes for submission to the Board of Governors.
- t) Regulate the conduct and discipline of the university students.
- u) Take actions necessary for the good administration of the university in general and exercise the required powers to this end.
- v) Delegate any of its powers to any Authority or officer on a committee.
- w) Perform such other functions as have been assigned to it by the provisions of the Act or may be assigned to it by the Statutes.
- x) Delineate priorities for research.
- y) Recommend apportioning the national research and development budget to the university.
- z) Guide and direct the Board of Studies of each College and institute on all matters relating to academics, including syllabi and duration of various courses.
- aa) Recommend disciplines for all academic studies in colleges, institutions, institutes, centers, and hospitals and help create the necessary infrastructure for them.
- bb) Help induct highly competent scientific and technical talent into the faculty of each College to enhance the quality of education and research
- cc) Recommend measures that would foster and enhance interaction and collaboration between the university, the existing national and international organizations, institutions, research centers, and the industrial base.
- dd) Workout and propose affiliation measures with foreign institutions of repute
- ee) Coordinate with relevant Government Ministries, Universities and Higher Education Commission.
- ff) Propose statutes to the Board of Governors for approval.
- gg) Prepare regulations for approval by the Board of Governors.

3. Academic Council

The Academic Council shall be the principal academic body of the university and subject to the provisions of the Act. The statutes have the power to lay down proper standards of instruction, research, and examinations and regulate and promote the academic life of the university and the colleges.

Composition

- a) The Vice-Chancellor - Chairman

- b) Deans of Faculties or Commandants and HoDs as may be required;
- c) Director General Medicine
- d) Director General Surgery
- e) Director Academics Higher Education Commission
- f) five members representing the departments, institutes, hospitals and the constituent colleges as may be prescribed by the Board of Governors
- g) Principals of the constituent or affiliated colleges
- h) Three Professors including Emeritus Professors
- i) The Registrar
- j) The Controller of Examinations
- k) The Librarian

Terms of References

- a) Approve the policies and procedures about the quality of academic programs.
- b) Approve academic programs.
- c) Approve the policies and procedures for student-related functions, including admissions, expulsions, punishments, examinations and certification.
- d) Help the vice chancellor evaluate, propose, and coordinate research and development projects and their respective institutes, colleges, and hospitals.
- e) Approve the policies and procedures, assuring the quality of teaching and research.
- f) Recommend the policies and procedures for affiliation with other educational institutions.
- g) Propose to the Syndicate schemes for the constitution and organization of Faculties, teaching departments and boards of studies.
- h) Appoint paper setters and examiners for all university examinations after receiving panels of examiners from the relevant authorities.
- i) Institute programs for the continued professional development of University Teachers at all levels
- j) Recognize the examinations of other Universities or examining bodies as equivalent to the corresponding examinations of the University.
- k) Regulate the award of studentships, scholarships, exhibitions, medals and prizes.
- l) Frame Regulations for submission to the Board of Governors
- m) Prepare an annual report on the academic performance of the University.
- n) Perform such functions as may be prescribed by Regulations.

4. Advanced Studies and Research Board (AS&RB)

Composition

- a) Pro-Vice Chancellor as Chairperson.
- b) Deans of concerned faculties.
- c) Head of departments of college/ institute (conducting PhD programs).
- d) Professor/ Associate professor/ Assistant professor (by nomination)
- e) Director Academics
- f) Director Academics (Clinical)
- g) Director QA
- h) Director ORIC.

- i) Controller of Examinations.
- j) Deputy Registrar (Secretary of the Board)
- k) Chairperson may co-opt other members as required.

Terms of References

- a) Review and recommend all matters promoting advanced studies and research in NUMS per HEC requirements
- b) Approve the proposed academic calendar before the initiation of a session
- c) Recommend any change in academic or examination policy before the start of the session
- d) Approve new/revised curriculum before implementation of any postgraduate programs
- e) Propose rules and policies regarding awarding Master/MPhil / PhD degrees
- f) Review and monitor the overall quality of doctoral Programs
- g) Approve panels of the subject experts for PhD entrance test.
- h) Approve synopses of PhD scholars
- i) Ensure the quality of PhD comprehensive examination
- j) Approve panels for the names of foreign thesis evaluators for PhD students
- k) Approve the thesis reports from foreign evaluators
- l) Perform other functions as specified by VC.

5. NUMS Coordination Committee

Composition

- a) Pro-Vice Chancellor Academics as Chairperson
- b) Provost (Academics, QA & RD)
- c) Concerned Deans
- d) Principals/Deans of all constituent/affiliated Medical & Dental institutions
- e) Director Academics
- f) Director Academics(clinical)
- g) Director QA
- h) Controller of Examinations
- i) Head of NUMS Department of Health Profession Education
- j) Any other Member(s) co-opted by Chairperson

Terms of References

- a) Review and recommend all academic matters related to NUMS undergraduate programs
- b) Approve new/revised curriculum before implementation of any undergraduate programs
- c) Approve the proposed academic calendar before the initiation of the session
- d) Recommend any change in academic or examination policy before the start of the session
- e) Review and monitor the overall quality of undergraduate programs
- f) Perform other functions as specified by Pro VC.

6. Faculty Board of Studies (FBS)

Composition

- a) Dean as Chairperson.
- b) Heads of the Departments associated with concerned faculty.
- c) Faculty/other co-opted members by nomination.
- d) Director Academics /NUMS representative
- e) Secretary as nominated by the Dean.

Terms of References

- a) Formulate policy on academic matters and research related to their discipline.
- b) Propose the curriculum, including contents, table of specifications and assessment scheme for new academic programs.
- c) Regular revisions of the curricula of existing academic programs are recommended.
- d) Recommend admission/selection criteria/seats for new academic programs to be started in the university.
- e) Evaluate the proposals for launching new postgraduate programs and make recommendations to the Academic Council for approval.
- f) Monitor the academic performance of postgraduate students.
- g) Approve biannual progress reports of postgraduate students.
- h) Recommend panels of external thesis evaluators for PhD students to the Advanced Studies Research Board (AS&RB).
- i) Recommend awarding the PhD degree to the successful students for approval by AS&RB.
- j) Perform such other functions as may be specified by the Vice Chancellor.

7. Board of Studies (BOS) Colleges/Institutes

Composition

- a) Head of College/Institute as Chairperson.
- b) Heads of the Departments.
- c) Heads of attached teaching hospitals
- d) Faculty/other co-opted members by nomination.
- e) Director Academics /NUMS representative
- f) Secretary as nominated by the Head of the College/Institute.

Terms of References

- a) Formulate policy on academic matters and research related to their discipline.
- b) Ensure the University's academic and research policy is implemented in their Colleges/Institutes.
- c) Any academic issues of the College/Institute shall be considered in BOS.
- d) Send the BOS's recommendations to the Academic Council for consideration and approval.
- e) Ensure the desired quality of academic programs and proper clinical training of the hospital students, etc.
- f) Send demands of the required faculty to the NUMS Secretariat as per the criteria of HEC/regulatory authorities.
- g) Consider and recommend faculty promotion cases.

8. Departmental Board of Studies

Composition

- a) Head of Department as Chairperson
- b) All Professor and Associate Professor of department
- c) 02 Assistant professor/ Lecturer of the Department
- d) 01 External Professor or Associate Professor
- e) Any other Member(s) co-opted by Chairperson

Terms of References

General

- a) Review the curriculum prepared by the departmental curriculum committee whenever the need arises.
- b) Support the college/institute's Board of Studies in developing and implementing the departmental educational strategy.
- c) Recommend that the examiners attend the Examination Directorate NUMS for the end-semester examination.
- d) Ensure that recommendations relating to all academic programs in reports of periodic reviews and accreditation exercises by professional, statutory regulatory bodies are appropriately addressed.
- e) Ensures that faculty's feedback on curriculum and teaching/research environment is collected and remedial measures are taken if needed
- f) Ensure appropriate mechanisms exist to consider students' views/feedback on curriculum, learning, teaching, assessment and research degree supervision.
- g) Monitor the quality and standards of all programs.
- h) Consider any other matters relating to educational provision referred to it by the board of studies or the university.
- i) Ensure that folders/dossiers of students and faculty members are properly maintained.
- j) Ensure that appropriate teaching/research resources are available in the department.

Conduct of Semester

- a) Develop an academic/research plan before the commencement of the semester.
- b) Identify the course instructors, program team and coordinators.
- c) Review the curriculum and make up any deficiencies in the curriculum for the smooth conduct of the program.
- d) Ensures that all quizzes and sessional and mid-term semester exams are conducted timely.
- e) The Departmental Board of Studies decides on retaking midterm/semester examinations based on acceptable reasons within four weeks but not later than four weeks.
- f) Evaluate the students' internal assessment results before submission to the Examination Directorate NUMS.
- g) Provide the student's incomplete grade, if any, to the examination directorate NUMS.
- h) Evaluate the overall performance of the students and decide remedial measures, if required.
- i) Prepare a Self-Assessment Report of the programs being conducted by the department.

9. Admission Committee (UG)

Composition

- a) Pro VC (Academics) - Chairperson
- b) Registrar - Member
- c) Director Academics - Member
- d) Deputy Director Admissions - Member
- e) Head of concerned department - Member
- f) Any coopted member by the Chairperson

Terms of References

Following will be the broader term of references of the committee:

- a) Review documentary requirements or documentation for admission purposes.
- b) Assess the admissions suitability of the candidates for the relevant programs.
- c) Approve the final merit list of students for the academic programs.

10. Admission Committee (PG)

Composition

- a) Pro VC (Academics) - Chairperson
- b) Registrar - Member
- c) Head of Institute/Dean - Member
- d) Head of concerned department - Member
- e) Director Academics - Member
- f) Director Academics (clinical) - Member
- g) Deputy Director Admissions - Member
- h) Any coopted member by the Chairperson

Terms of References

Following will be the broader term of references of the committee:

- a) Review documents required for admission/ NUMS entrance test score.
- b) Interview the potential postgraduate candidates.
- c) Assess the suitability of the candidates as per the prescribed criteria of NUMS and regulatory authorities for the relevant programs.
- d) Approve the final merit list of candidates for the academic programs.

11. Curriculum Committee

Composition

- a) Dean of concerned faculty as Chairperson

- b) Director Academics/ Director Academics(clinical)
- c) One representative from NUMS Examination Directorate
- d) One representative from NUMS Department of Health Profession Education
- e) Head of Department along with at least two members from concerned faculty
- f) One external member (industry/ R&D organization)
- g) One student representative
- h) One Alumnus
- i) Any other Member(s) co-opted by Chairperson

Terms of References

- a. Oversee the Academic Governance of the following aspects of the University's curricula:
 - 1) The overall composition and profile of the University's courses
 - 2) Development of the curriculum comprising of:
 - Objective/ Outcome
 - Scheme of studies i.e. total credit hours, duration, list of courses
 - Course content
 - Teaching methodology
 - Table of specifications
 - Assessment tools
 - Learning Resources
 - 3) Courses review
 - 4) The establishment and disestablishment of courses at the University
 - 5) Major Course Amendments, including gradual changes over time. Major Course Amendments include changes to:
 - Course title;
 - Qualifications awarded;
 - Course-level learning outcomes affecting more than 30% of the course (e.g. through the introduction of a new major or a concomitant increase or reduction in the overall volume of learning)
 - Design or delivery of the course that engenders markedly different graduate attributes
 - Individual units of study and Minor Course Amendments are dealt with at the faculty level
- b. Recommendations for effective curriculum implementation, including teaching methodologies and assessment tools to meet best global standards.
- c. Revision of existing curriculum/syllabi after every 3years or when necessary
- d. Evaluation of the curriculum to ensure that educational outcomes are achieved
- e. The Curriculum Committee will consider proposals to establish, disestablish, or majorly amend a university course. If the proposal is deemed appropriate, the Curriculum Committee will recommend it to the Coordination Committee for endorsement.

12. NUMS ORIC Steering Committee**Composition: -**

a.	Vice Chancellor NUMS	Chairperson
b.	President and CEO, Ferozsons Labs Ltd	Co-Chair
C.	Pro Vice Chancellor, NUMS	Member
d.	Director Bio-Labs Pvt Ltd	Member
e.	Consultant Pharma Bureau	Member
f.	Pharmaceuticals Manufacturing Consultant	Member
g.	CEO Focus & Rulz	Member
h	Dean MDS/Director Research NUMS	Member
1.	Director ORIC NUMS	Member
j.	Asst. Director ORIC NUMS	Member/ Secretary

Terms of Reference

- Work with the primary focus to boost the visibility and credibility of NUMS research initiatives.
- Set targets against HEC's self-assessment Key Performance Indicators and review NUMS ORIC's performance biannually.
- Formalize a detailed 5-year roadmap for the ORIC - NUMS with annual targets.
- Form strategic alliances for research development at the regional and global levels.
- Build research collaboration plans to strengthen NUMS's vision.
- Be responsible for appraising and reviewing the outreach plans, Training Programs, and business startups and suggesting doable actions for improvement (if needed).
- Perform other functions as specified by the Vice Chancellor NUMS.
- Ensure and facilitate close working of all constituent & affiliate colleges and institutes of NUMS to support research culture.
- Make recommendations on an exclusive research initiative fund based on resolving specific community problems and oversee the fund's annual progress.

13. NUMS Grant Review Committee (GRC)

S. No	Designation	Role
a.	Pro-VC Academics	Chairman
c.	Director Research	Member
d.	Director Academics	Member
e.	Treasurer	Member
d.	Director ORIC	Convener
e.	AD ORIC	Secretary

14. Therapeutic Think Tank (TTT) Committee Members

S. No	Designation	Members
a.	Pro-VC Academics	Chairman
b.	Director Research	Member
c.	Director Admin Affairs	Member
d.	Director ORIC	Convener
e.	AD ORIC	Secretary

15. IPFP Selection Committee

S. No	Designation	Members
a.	Pro-VC Academics	Chairman
b.	Dean of Respective Faculty	Member
c.	HoD of Respective Faculty	Member
d.	Additional Director HR	Convener
e.	AD ORIC	Secretary

16. Intellectual Property Rights (IPRs) Committee

S. No	Designation	Members
a.	Pro-VC Academics	Chairman
b.	Dean of Respective Faculty	Member
c.	Director Research	Member
d.	Director (Legal Affairs)	Member
e.	Director ORIC	Member
f.	Assistant Director ORIC (RS)	Member & Secretary
g.	Legal Advisor ORIC (IP)	Member
h.	Co-Opted Member	Member

17. Interim Placement of Fresh PhDs Committee

S. No	Designation	Members
a.	Pro-VC Academics	Chairman
b.	Dean of Respective Faculty	Member
c.	HoD of Respective Faculty	Member
d.	Additional Director HR	Member
e.	Manager ORIC (IPFP Focal person)	Secretary

18. NUMS Plagiarism Standing Committee

S. No	Designation	Members
a.	Pro-VC Academics	Chairman
b.	Dean of Respective Faculty	Member
c.	Director QA	Member
d.	Director Research	Member
e.	HEC's Nominee	Member
f.	Manager Research	Secretary
g.	Co-opted member on need basis	

19. Convocation Committee

A Committee of the following officers is constituted to formulate/ deliberate upon the convocation protocol/ policy/ SOP for constituted/ affiliated colleges/ institutions.

S. No	Designation	Members
a.	Registrar	Chairman
b.	Controller of Examinations	Member
c.	Director Legal	Member
d.	Dy Registrar	secretary

The committee will furnish its report to the competent authority.

CHAPTER III ADMISSION AND REGISTRATION

1. Academic Calendar and Admission Schedule

- a) Each college and institute shall, at least six months before the commencement of an academic session, furnish to the Registrar information about the number of seats available, educational programs intended to be conducted, details and availability of faculty and all other facilities available with them for the conduct of programs.
- b) The Director of Academics shall prepare the academic calendar and students' induction plan, which will be approved by the Vice Chancellor before advertising the admission schedule.
- c) Advertisements mentioning the eligibility criteria shall be made at least three months before the commencement of the program through print media and on the NUMS website.
- d) A candidate applying for admission to the University shall follow the terms/conditions as prescribed in the advertisement.

2. Eligibility Criteria

- a. The minimum eligibility criteria for NUMS academic programs duly synchronized with the instructions & guidelines of the regulatory authorities is given as (**Annexure-A**)
- b. Other specific requirements of any program shall be defined in the curriculum of that particular program.

3. Admission Process

Admissions shall be made purely on open merit based on the following components:

a. PhD Programs

Components	Requirements	Percentage
Previous academic performance	MS/MPhil or Equivalent Degree (18 years)	25%
Admission test	Minimum 60% in University Subject test/ GRE/ HAT General or equivalent	25%
*Statement of purpose (SOP)	Mentioned below	25%
Interview	PhD Admission Committee	25%
Total		100%

Note: "GAT-General by Education Testing Council/ GRE by Education Testing Service as recognized by HEC"

b. MPhil/ Masters/ Fellowship/Diplomas or Equivalent Programs

Components	Requirements	Percentage
Previous academic performance	BS/ MBBS/ BDS or equivalent	25%
GAT-General/ NUMS Entry test	Minimum 50% accumulative test score	50%
Interview	Admission Committee	25%
Total		100%

- c. After initial scrutiny of applications by the Admission Office to ensure all document requirements, etc., a Statement of Purpose shall be sent to the relevant department where their Departmental Internal Evaluation Committee will review the applications in terms of their scientific viability and faculty research interests and expertise
- d. HoD will send the review report to the Admission Office and will attach the report along with all other documents in the applicants' dossier for the PG Admission Committee
- e. The Admission Committee will conduct interviews
- f. The finally admitted students' list shall be sent to the concerned colleges and institutes for enlisting the filled-in registration forms (Form #PG-01) from the students for transmission to the Registrar's office for eventual issuance of registration numbers
- g. For any unforeseen reason, when a student cannot continue with their studies in the University, the student may send an official request through his HOD and Dean/ Head of the institution to the Registrar for clearance and notification of release from the University
- h. The candidates in service shall furnish no-objection certificates from their competent authority for admission in that particular PG program. They shall submit NOC to the admission office
- i. No person whose registration or admission in NUMS has been earlier cancelled due to disciplinary reasons shall be entitled to apply for NUMS under any circumstances
- j. No foreign candidate shall be eligible for admission unless he/she holds a minimum TOEFL score of 500 or an IELTS score of 5.50. Language proficiency test results shall not be required or demanded where an international student has acquired education from a higher secondary level onwards with English as a medium of instruction. However, a no-objection certificate from HEC shall be mandatory for international students. The international students under international student exchange programs may be enrolled/ admitted, subject to prior approval from the Vice Chancellor, for any single or more semester(s) or course(s) subject to such conditions as may be agreed by the competent authorities under the relevant exchange programs.

4. Selection and Merit Computation

- a. The final merit list of selected candidates for admission shall be conveyed to the Registrar's Office to seek final approval from the Vice Chancellor and other admission-related formalities up to the extent of available seats. Suppose a candidate selected for admission and included in the list does not pay the prescribed fee within the stipulated time. In that case, their name will be dropped, and the candidate appearing next on the merit list shall be offered admission. The finally admitted students' list shall be sent to the concerned institution to enlist the filled-in registration forms from the students, which will be sent back to the Registrar's Office to issue registration numbers.
- b. For any unforeseen reason, when a student cannot continue with their studies at the university, the student may send an official request through their HOD and Dean/ Head of the institution to the Registrar for clearance and notification of release

from the university.

- c. HEC policy for enrollment in dual degree programs shall be followed. However, permission to enrol in a dual degree program shall be obtained from the HOD and the concerned Dean.
- d. **Fee Matters:** The students of postgraduate academic programs shall be required to deposit the University's fee for admission and tuition purposes. While the admission fee remains non-refundable under all circumstances, the claims for refund of tuition fee, if any, shall be settled in terms of the guidelines/ instructions of the concerned regulatory authorities. Tuition fees shall be charged for the campus period. The University has a right to vary fees during the academic program.

The tuition fee may be refunded as follows:

- 1) Up to 7 days of the commencement of classes: 100%.
- 2) Within 8-15 days of classes: 50%
- 3) More than 15 days of classes: No refund of fee.

e. MBBS/BDS

- 1) Once the admission is announced, applications for admission shall be filed online through the NUMS website portal. MBBS/BDS entry test, selection, admission & fee matters will be governed by the latest PM&DC/ regulatory body instructions.
- 2) The candidates shall be selected on merit, determinable by past academic record, entry test, and all other relevant selection criteria set out by the University and the concerned regulatory authorities.
- 3) The Registrar's office shall finalize the shortlisting of successful candidates depending upon the availability of seats.
- 4) The final merit list shall be uploaded on the University's website and also sent to the concerned colleges. Where a successful candidate on the merit list does not deposit the fee by the due date, admission shall be granted to the next successful candidate on the merit list.
- 5) All admitted students shall be registered with the University upon submission of their application and with the concerned regulatory authority.
- 6) Fee matters, etc.-Students are required to deposit the University's fee for admission and tuition purposes. Claims for refund of tuition fees, if any, shall be settled according to the PM&DC guidelines.

5. Semester Based Programs

a. Transfer of Credit Hours

- 1) Transfer credit is the granting of credit for academic work completed at any other/ same HEC-recognized institution.
- 2) Inward migration shall be allowed only from institutions approved or accredited by these authorities.
- 3) No credit hour of a course less than B-grade for postgraduate programs shall be allowed. The student will have to cover the entire deficient course, if any.
- 4) A student desiring transfer of credits to NUMS shall file a formal application in the prescribed form along with a no objection certificate (including character Verification) for change of the University, copies of all previous transcripts/credit hours' transfers/course outline, HEC grant (if any) utilization and progress report. After verification of these documents by the Registrar, the concerned Dean shall, in consultation with the concerned heads of the department (HoDs) and supervisors, if any, determine the equivalency of the previous courses and furnish his/ her recommendations to the Vice Chancellor through the Registrar.

- 5) Only relevant/common courses shall be transferred with grades to the opted program.
- 6) The credits transferred are counted towards the degree requirement, and the GPA of the transferred credits shall be counted towards the calculation of the CGPA.
- 7) The transfer of research work is permissible, provided the host university accepts the research conducted at the parent university before the credit transfer.
- 8) For outward migrations from NUMS, the Registrar shall issue no objection certificates, transcripts, and other documents.

b. Change of Program

- 1) The program transfer facility shall only be for semester-based Master's programs with the same eligibility criteria. This policy does not apply to Ph.D. programs.
- 2) They will apply to Registrar Dte with the approval of concerned HoDs within two weeks of the initiation of the first semester. The Registrar Directorate will issue a registration number for the new program to such a student.
- 3) The transfer will depend on the availability of seats in the opted program.
- 4) NUMS reserves the right to reject cases without assigning any reason.

c. Freezing/ Deferment of Academic Session

- 1) Freezing for at most two semesters shall be allowed only after successful completion of the first semester against filing of an application in the prescribed form (Form # PG-03). All applications in this regard shall be submitted before the commencement of the freezable semester(s) to the concerned head of department (HOD), who will send his/her recommendations for final approval through the concerned Dean to the Registrar.
- 2) Under special circumstances, freezing of the first semester or deferment for one year may be requested in the first semester, which will be considered after approval of the competent authority.
- 3) For the freezing of the semester, the student shall submit 25% of the monthly tuition fee in advance to maintain his/her registration. However, the student shall complete his/her degree requirement within the stipulated time (not exceeding the maximum limit).
- 4) In case of postponement, the student will resume studies the following academic year. Subsequent requests for deferred admission will not be considered.
- 5) Students granted deferred admission to a program of study will be admitted in The next academic session and will not be required to reappear for the admissions test, re-sit for an interview or pay a new application fee.
- 6) Students shall only seek admission to another course/ program at any institute with prior written approval from the concerned Dean.
- 7) Where a request for deferred admission is denied, the individual will be required to reapply for admission.

6. Annual Based Programs (MBBS/BDS)

a. Transfer Policy

- 1) A student shall only be considered for transfer out/in after passing the Second Professional MBBS or First Professional BDS. However, if seats are vacant due to any reason after the closure of Admissions in the first year, the college may accept a transfer student from any other College as per the prescribed procedure, provided the student has appeared in the NUMS Entry Test.

- 2) The seat shall be considered occupied if a student fails Professional exams and is academically detained.
- 3) All colleges, public or private, shall at all times publicly display any vacant seats available in each year of the program and inform PM&DC of such vacancy within fourteen days of its falling vacant. Transfer Shall accepts no transfer to a vacant seat until the vacancy has been publicly displayed for at least fourteen days, allowing the students to apply for transfer to such a vacancy.
- 4) The transfer shall be allowed only between Institutions recognized by the relevant Regulatory Bodies.
- 5) There shall be no restriction on transfer from a public to a private college or vice versa.
- 6) If a W&R seat becomes vacant, either the W&R Directorate will allow a W&R student to transfer from another NUMS College or issue an NOC to allow non-W&R students to be considered for transfer.
- 7) In case two or more applicants are desirous of transfer against a single seat, then merit shall be determined by the admitting college as per:

Sr.#	Category	Total Marks	Marks Obtained	Merit
1	All previous Professional Examination (s) marks (%age)	60 (+5 for each Distinction, -5 for each supplementary)		
2	NUMS College Applicant	10		
3	Wards of Army Personnel	10		
4	Interview	20		
Total		100		

- 8) The transfer process must be completed within two months of advertisement intimation to the University.
- 9) A college to which a student has been transferred and the college from which the student is being transferred out shall inform NUMS and PM&DC within fifteen days of such a transfer.

b. Transfer from a Foreign College:

- 1) As per PM&DC policy, a student studying in a Foreign medical or dental college may apply for a transfer to a Pakistani medical or dental college subject to having completed at least two years of studies in the foreign college and having qualified the National Equivalence Board (NEB) Examination conducted by the Authority.
- 2) A Foreign student may apply for a transfer, provided a vacant seat is available in the college to which a transfer is sought.
- 3) An international student shall only be allowed to transfer to the same program in which the student was enrolled in the foreign college and in the year for which the student qualified for the NEB Exam.

c. Documents Required for Transfer:

- 1) Transfer cases will be processed at NUMS after receipt of the following documents from the student:
 - a. Application for the transfer must be made by the students themselves and not by a nominee or relative.
 - b. Clearance certificate from the relieving college.
 - c. Accepting certificate from the admitting college.
 - d. Detailed transcript/ academic record.
 - e. Prescribed Transfer Fee to the University.

Note:

- a. All Medical/ Dental Colleges are to display the NUMS Transfer Policy appropriately.
- b. At the time of admission, students are to submit an affidavit/ undertaking that they will not request transfer to any other college before qualifying as 2nd Prof of MBBS or 1st Prof of BDS.

c. Course Exemption/ Transfer of Completed Course Work Policy

- 1) The University may grant course exemption in MBBS / BDS programs and accept transfer of course work completed at another PM&DC-recognized institution.
- 2) Only qualified/passed courses with ≥ 50 % marks will be allowed for exemption/transfer.
- 3) The concerned dean considers applications about course exemption/transfer of course work on a case-to-case basis with reference to NUMS program-specific study schemes and course outlines.
- 4) A student desiring course exemption/ transfer of course work to NUMS shall file a formal application in the prescribed form along with the following documents:
 - Original NOC/Migration Certificate
 - Original consolidated Transcript on which basis course exemption/transfer of course work is applied
 - Copy of the syllabus with detailed course contents for which the student has applied for course exemption/transfer of course work duly verified/attested by the concerned authority of the institute/university

- 5) After verification of these documents by the Registrar NUMS, the concerned Dean shall determine the equivalency of the courses completed in another university with NUMS and furnish their recommendations to the Pro Vice-Chancellor Acad. for approval through the Registrar.
- 6) The subject course transferred is counted towards the degree requirement.

d. Freezing policy for MBBS/BDS programs:

- 1) Freezing of the academic year can only be applied after passing the second professional exam of MBBS and the first professional exam of the BDS program.
- 2) The maximum time for freezing the academic program should be at most 03 years for MBBS students and two years for BDS students.
- 3) It can be availed only once in the entire academic program.
- 4) All applications in this regard shall be submitted to the head of department (HOD) before the commencement of the academic year. The HOD will send his/her recommendations for final approval through the concerned Principal/Dean to the Registrar, NUMS.
- 5) To freeze the academic session, the student must submit 25% of the tuition fee in advance to maintain his/her registration, which will be adjusted after joining the college.

CHAPTER IV ACADEMIC POLICIES & GUIDELINES

1. NUMS Semester System

- a. NUMS shall follow a semester system for all postgraduate academic programs, each having two regular semesters in the academic year: The Spring semester from January to May and the Fall semester from August to December. However, in special circumstances, the program can be started other than the time mentioned above with approval from VC. Each regular semester shall be for 18 weeks' duration (including examination). There is an additional summer semester of 09 weeks with weekly contact hours for a course being double the regular semester.
- b. Students can be enrolled for the Fall/Spring semester or any single course and are issued transcripts with letter grades at the end of the semester.
- c. International students under the student exchange program will be enrolled for any semester or any single course, and the University will issue transcripts with letter grades at the end of the semester. The admission offer letter of the international student will be forwarded to HEC for issuance of NOC.
- d. Students may opt for deficient/ improvement courses in the summer semester or whenever the course is offered.

2. Summer Semester

- a. A summer session can be offered depending on staff availability and necessary facilities. During summer sessions, students can enroll in a maximum of 2 Theory courses or 1 lab course.
- b. Students can enroll in up to a maximum of 08 credit hours during summer.
- c. The contact hours per week during the summer semester will be doubled to ensure that the course is completely taught in a summer session that is half the duration of a regular (fall/spring) semester.
- d. However, the student must complete all formalities applicable to the repetition of a course, i.e., sessional, mid-semester examination, project, assignments, quiz, etc., and the End-Semester Examination.
- e. Each department/ faculty shall clearly define the details of credit hours of its academic program, which shall be shared with all stakeholders along with curricula.
- f. The course load per semester shall be a maximum of twelve credit hours. The credit hours are denoted by two digits within brackets with a plus in between. The first digit represents the theory part, while the second digit represents the practical work, like 3 (2+1), where 3 are total credit hours, with 2 for theory and 1 for useful work. However, under unforeseen circumstances, the student may take one additional course of 03 CHs in a semester with the approval of the concerned dean.
- g. Course credit values awarded must reflect the quality and standards of the University and comply with the requirements of the NUMS/ regulatory bodies' qualification frameworks for that academic level.
- h. Credits assigned to a course and course description shall be approved first by FBS before sending to the University.
- i. Credits are earned only when the course and assessment have been completed successfully.

3. Programs' Requirements

For all NUMS academic programs, a standardized scheme of studies with the coursework requirements is tabulated below:

S. No	Disciplines	NUMS Titles	Programs Requirements	Duration
Doctoral Programs				
1.	Doctorate	Doctor of Philosophy	Total 48 credit hours consisting of 18 credit hours course work and 30 credit hours of research.	3-8 years
Master Programs				
2.	Basic Medical Sciences	Master of Philosophy	Credit Hours: 34 • Course work: 24 • Research work: 10	2-4 years
		MSc Healthcare Administration	Credit Hours: 36 • Course work: 24 • Practicum/Seminar: 06 • Research: 06	
		MSPH	Credit Hours: 36 • Course work: 24 • Practicum: 02 • Research: 10	
		MHPE	Credit Hours: 34 • Course work: 24 • Internship: 04 • Research: 06	2-4 years
3.	Clinical Disciplines	MSc Cardiac Anaesthesia	Credit Hours: 38 • Course work: 30 • Research: 06 • Internship: 02	2-4 years
		MS Transfusion Medicine	Credit Hours: 34 • Course work: 28 • Research: 06	2-4 years
		Diploma in Cardiology	Credit Hours: 33 • Course work: 27 • Internship: 06	2-3 years
4.	Biological Sciences	MS in Human Genetics	Credit Hours: 36 • Course work: 26 • Research work: 10	2-4 years
		MS in Microbiology & Immunology		

		MS in Biotechnology		
		MS in Phytochemistry and Natural products		
		Masters of Science in Bioinformatics		
		Masters of Science Nanomedicine		
5.	Psychology	Master of Science in Clinical Psychology	Credit Hours: 46 • Course work: 24 • Internship: 16 • Research work: 06	2-4 years
		MPhil Psychology	Credit Hours: 33 • Course work: 27 • Research work: 06	
6.	Clinical Fellowship	Clinical Fellowship in Otolaryngology & Audio-Vestibular Rehabilitation	Credit Hours: 36 • Course work: 30 Research work: 06	2 year
7.	Clinical Certification	Clinical Certification In Hybrid Imaging (PET-CT Scan)	Credit Hours: 24 • Course work: 18 • Research work: 06	1 year
		Clinical Certification in General Body & Vascular Interventional Radiology	Credit Hours: 24 • Course work: 18 • Research work: 06	
		Palliative Care	Credit Hours: 12	6 months
8.	Non-Clinical Certification	Healthcare Administration	Credit Hours: 12	6 months
		Health Professions Education		

UNDERGRADUATE PROGRAMS

Semester Based Programs

Disciplines	Programs	Credit Hours	Duration
BS Programs	Nursing (Generic)	135	4 - 6 years
	Allied Health Sciences	127	
	Biological Sciences(Biotech)	124	
	Biological Sciences(Genetics)		

	Biological Sciences(Microbiology)		
	Public Health	130	
	Psychology	138	
	Social Sciences of Health	128	
	Human Nutrition and Dietetics	132	
	Nursing (Post RN)	60	2 years
Associate Degree	Blood Transfusion Medicine	66	
	Emergency and Clinical Medical Technology	64	
Any other program at any constituent/affiliated institution, approved by Academic Council			
Annual Based Programs			
	Disciplines	Contact Hours	Duration
	MBBS	6000	5 years
	BDS	4775	4 years

4. Faculties at NUMS

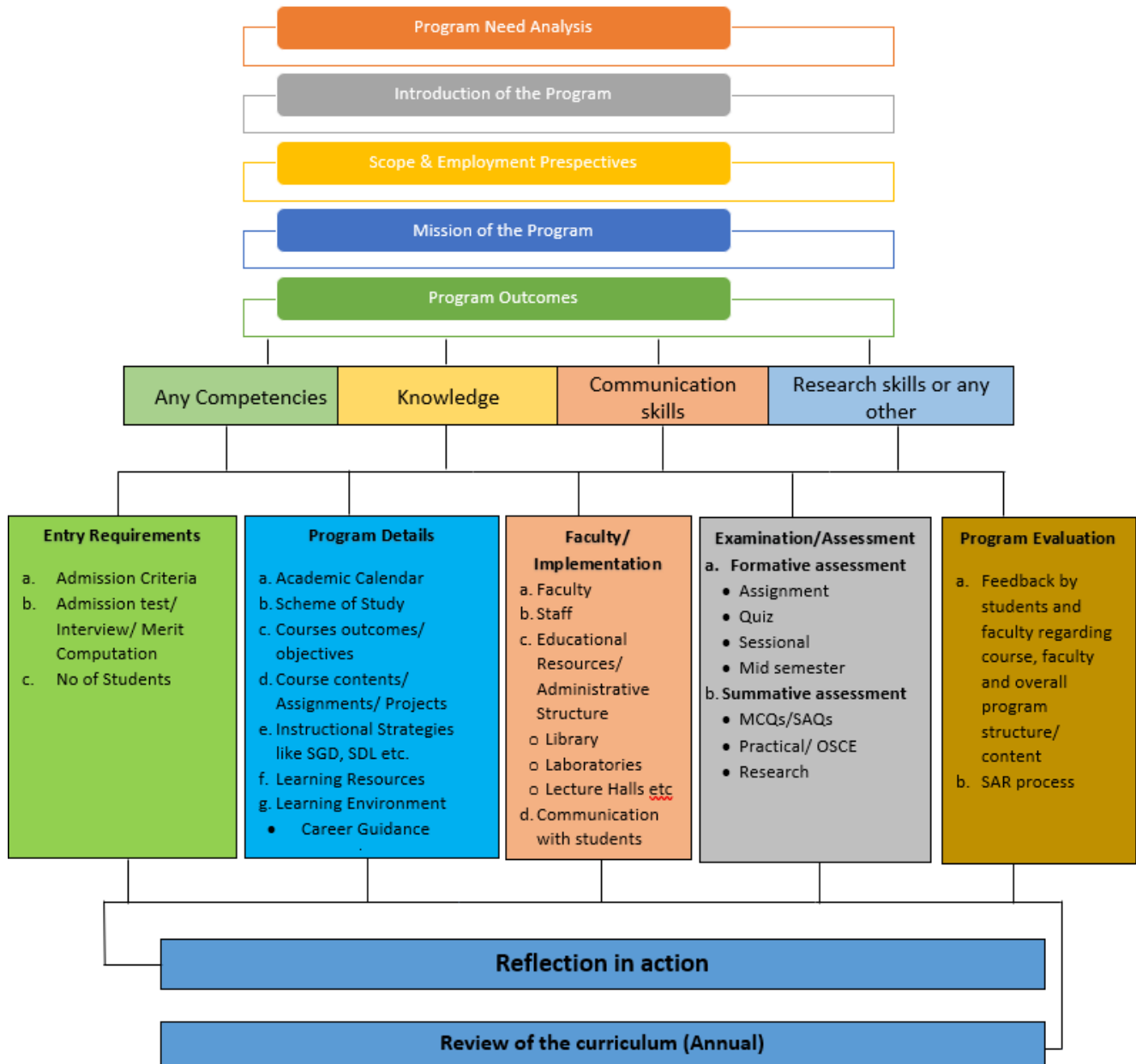
Following are the Academic faculties at NUMS:

- 1) Basic Medical Sciences
- 2) Medicine and Allied Sciences
- 3) Surgery and Allied Sciences
- 4) Dentistry (Dental Sciences)
- 5) Health Management Sciences
- 6) Pathology
- 7) Cardiovascular Sciences
- 8) Radiology and Imaging
- 9) Education including health professions education
- 10) Multi-disciplinary studies (including humanism and behavioral sciences).

5. Guidelines for Development/ Revision of Curriculum

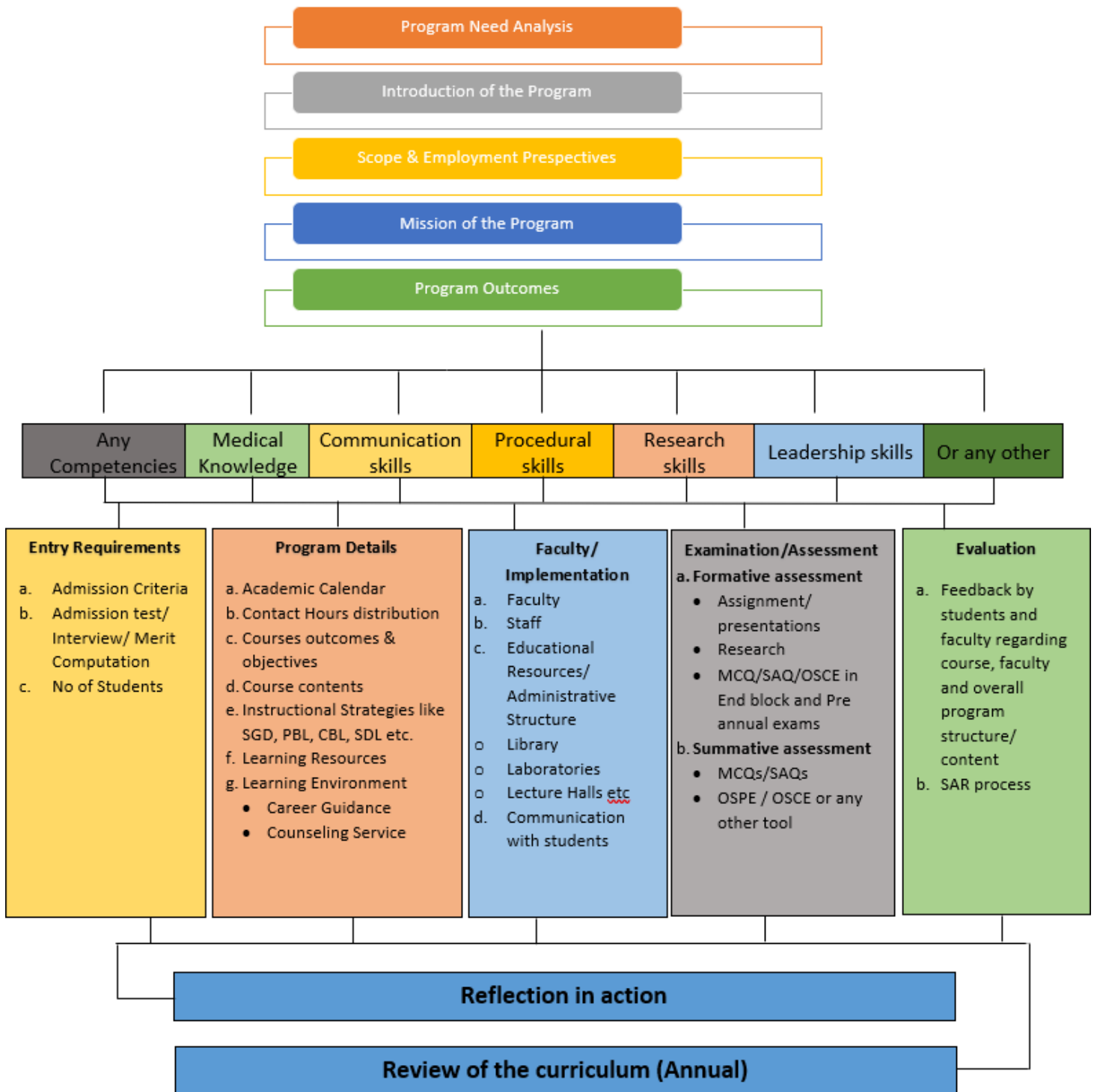
CURRICULUM MAP FOR SEMESTER BASED PROGRAMS

Name of Program _____ Name of Department _____



CURRICULUM MAP FOR ANNUAL PROGRAMS

Name of Program _____ Name of Department _____



6. Steps for Development of Curriculum

Developing an effective curriculum is a multi-step, ongoing and cyclical process. The process progresses from evaluating the existing program to designing an improved one, implementing a new one, and then assessing the revised one. Steps of an Effective Curriculum Development Process are:

a. **Planning:**

- 1) **Identify the Need.** The first step in curriculum development clearly states the need to initiate a curriculum development effort. An issue statement should indicate a focus group, the scope of the problem (issue) to be addressed by the curriculum, and the consequences. The need statement should describe the issue in simple language. This process involves reviewing recent issues and trends in the discipline nationwide and worldwide. This, in turn, will support the needs assessment and the philosophy that should be developed.
- 2) **Conduct Need Assessment and Analysis.** The need assessment and analysis step in curriculum development systematically focuses on learning about an issue or problem and the people directly affected by it. A needs assessment shall ascertain each stakeholder's perceptions, concerns, and desires. A need assessment provides the information to determine outcomes (educational objectives) based on a factual foundation and learners' needs. A need assessment also provides baseline data to evaluate the achievement of intended outcomes.

b. **Development of curriculum:** The Curriculum Committee shall finalise the curricula specifying the details of the core course, elective courses, table of specifications, examination and degree requirements. Every academic program must comprehensively contain the following:

- 1) **Titles/ Nomenclature for the Program/ Degree.** NUMS has developed guidelines for adopting titles/ nomenclature for the degree as per HEC NQF qualification titles.
- 2) The degree may be named per the level prescribed by the regulatory authority and the respective major field of study/discipline.
- 3) A program containing only one field of study as per its respective field of concentration (100%). Examples are a Doctor of Philosophy in Pathology, Master of Philosophy in Chemical Pathology, Master of Science in Cardiac Anesthesia, Bachelor of Science in Medical Laboratory Technology, etc.
- 4) A program contains fundamental components of two fields of study with a percentage of 50-50; the qualification may be connected with "AND."
- 5) A Program with specialization in at least 25 per cent of the main field; the specialization may be indicated in Brackets, for example, Master of Science in Nursing (Midwifery), Bachelor of Science in Biological Sciences (Microbiology), etc.
- 6) A major-minor Program that contains at least 25 per cent components in other fields of study is named using the connector "WITH".

c. Introduction of the Program

- 1) The program should be broad-based and consider the relevant needs of other on-campus programs; some courses could be offered as electives in different programs.
- 2) Confirmation that Institution level endorsement has been obtained
- 3) Explain what makes the program unique or different to similar programs, if any, offered in the market.
- 4) Specify any prerequisites for enrolment.

d. Scope/Employment Perspective: It shall be relevant to the level of the degree program.

e. Program Mission: The document shall establish a clear mission aligned with NUMS's vision.

f. Program Outcomes: As all our programs are outcome-based, learning outcomes shall be clearly defined. In this step, the needs identified in the needs assessment process are converted into measurable outcomes for the learners. All intended outcomes should serve as a bridge between the issue of concern and the learner's needs. Intended outcomes should clearly state, in measurable terms, what the learner can do due to participation in planned activities designed to help the learner attain knowledge, attitudes, skills, aspirations, and behaviors to bring about change. The intended outcome should be measurable and specific. A list of particular skills, knowledge, or characteristics learners will have from going through the curriculum can be generated.

g. Expected competencies. Which competencies are being expected from the students

h. Entry requirement of Program

- 1) **Admission Process:** Eligibility criteria with a complete admission process must be defined clearly.
- 2) **Total number of students:** The number of students to be inducted into the course must be mentioned.

i. Program details

- 1) **Academic Calendar:** The date of commencement of the session and start of the semester examination shall be mentioned
- 2) **Scheme of Study:** Outlines a basic framework for what to do, how to do it, when, and how to know if it has been achieved. It must include the following. It should be designed according to regulatory authorities' requirements.
- 3) **General Information:** Course title, credit hours and course code.
- 4) **NUMS Guidelines for Allocation of Course Codes.**
 - A. A unique alpha-numeric code identifies every course offered, usually three letters followed by three digits.
 - B. **Rules to Follow for Course Code.** There are two important blocks of information for course codes. (ABC-000)
 - C. **Course Prefix.** The first part of a course code is a series of letters indicating the course's general subject—for example, Allied Health Sciences (AHS), Medical Lab Technology (MLT), etc.
 - D. **Course Numbers.** The second part of a program's course code is a series of three-digit numbers.

- (1) The first digit represents the program level as per HEC guidelines.
 - BS level courses will be assigned 611
 - Masters' level courses will be assigned 711
 - Advanced-level courses will carry 811.
- (2) At NUMS, the second digit represents the semester. For example, a course offered in a master's program in the first semester will be 711, for the second semester 721, for the third semester 731 and so on.
- (3) The third digit represents the number/sequence of courses taught in a semester. For example, in the master's program, the first course in the first semester will be 711, the second 712, the third 713, and so on.
- (4) If the same elective course is offered in different programs, then the course code and title shall be the same in all programs.
- (5) The course code for elective courses will be "01" after the program level. i.e. 701, 702....., 801, 802.....
- (6) The course code for research will be "99" after the level of the program, i.e. 799, 899
- (7) The institute shall get the code of a new course first ratified from the NUMS-CMS Database before placing it in any Curriculum Committee.

j. Detail of Courses

Identify the necessary knowledge to accomplish the intended outcomes. Plan the sequence in which the content will be presented and outline the content, including knowledge, attitude, and skills that learners can acquire through participating in the planned curriculum activities. It shall specify:

- 1) Course-specific outcomes/objectives. Start with measurable verbs
- 2) Course Syllabus
- 3) Teaching Methodologies/ Instructional Strategies
- 4) Assessment tools
- 5) Learning Resources

k. Faculty

- 1) List of teaching faculty in relevant field (minimum six as per HEC requirement)
- 2) List of staff other than faculty

l. Educational Resources/ Administrative Structure

- 1) Library
- 2) Laboratories
- 3) Lecture halls etc.

m. Mechanism of Students' Academic Advising and Support

To be mentioned by the institution. The academic advisor shall assist in academic, personal, financial and extra-curricular domains and provide career guidance to the students. Confidential therapeutic support shall be provided to all students to help them address their personal or emotional problems that may get in the way of having a good experience and realizing their full academic and individual potential.

Assessment. Each course shall have its assessment blueprint as per the NUMS Examination Policy. Assessment tools to be decided by the concerned faculty

n. Teaching Plan and Time Table

- 1) Teaching in the relevant courses organized for degree purposes shall be conducted in different departments of the constituent and affiliate institutions through interactive lectures, tutorials, discussions, seminars, demonstrations,

lab practical, fieldwork, self-directed learning or any other teaching methods as may have been approved by Departmental Board of Studies.

- 2) The institution at their level shall decide on the table and structuring of training programs in light of the guidelines/instructions of the regulatory authorities.
- o. Evaluation of the Program Through Quality Assurance Mechanism.** Mechanisms to monitor program quality shall be mentioned in the proposal, including effective feedback mechanisms as follows:
- 1) **Evaluation by students of: (Annexure-H)**
 - Course
 - Faculty
 - Overall program structure / content
 - 2) **Evaluation by faculty of:**
 - Course
 - Teaching and Learning environment through faculty survey form
 - Faculty who have taught in the program (peer review)
 - Overall program structure / content
 - 3) **External review of the programs:** External Review of Programs shall take place through Self-Assessment Reports prepared by the department after each semester for semester-based programs and annually for MBBS/BDS and reviewed by external subject specialists invited by QA Dte as Assessment Team Members on completion of a degree program.
- p. Post graduate Program Review:** An Annual Graduate Program Review is also an HEC requirement. Therefore, it will be undertaken internally every year by the 'NUMS Program Review Team' constituted by QA Dte with the approval of the competent authority. External review of the graduate programs will be carried out by HEC's Quality Assurance Agency Team as and when required by the Regulatory Body.
- q. Sustainability of the Program. -**
- 1) At least 50 % of approved seats are required for the program to be offered. However, permission may be obtained from VC to run the program with less than 50% induction.
 - 2) The program will only be offered in that session if specialized faculty, supervisors, etc., are available. However, the program will be offered again when the requirements are fulfilled.
- r. Review of Curriculum.**
The existing curricula shall be reviewed every three years or earlier if they need improvement after the evaluation process and passed through the Academic Council's approval process as aforesaid.

7. Modifications in the Curriculum

Preamble. From time to time, any department/ faculty may need to make modifications in their program/ module or course as a part of continuous improvement after evaluation of the program. Dean will be overall responsible for finding out if the proposed change is minor or major based on the following guidelines:

- a) **Minor Modification:** It includes a change in a course that does not affect a program's overall aims, objectives and outcomes. Minor modifications need approval from the AS&RB/ NUMS Coordination Committee. Minor modification may involve one or more of the following aspects:
 - b) Changes to the title or description of a module/course.
 - c) Changes to the teaching methodology to be more engaging for students, such as enhanced use of digital instructional technology, a shift in the balance of lectures and seminars, etc.
 - d) Changes in assessment tools
 - e) Addition or deletion of modules and/or courses in a manner that does not alter a program's overall aims, learning outcomes or academic requirements.
- 2) **Major Modification:** It includes revisions in a program that alter the program's overall aims, objectives, outcomes, and academic requirements. Major modifications need approval from the AS&RB/ NUMS Coordination Committee and the Academic Council. A major modification may feature one or more of the following:
 - a) Change the title of the program
 - b) Change to the program's overall aims, learning outcomes and learning objectives of the program
 - c) Change in the duration and/or mode(s) of delivery of program (online; face to face),
 - d) Changes in the program's requirements, including student admission criteria or standards
 - e) Change to weightings at module or course level for the assessment of students
 - f) Considerable changes to the content and/or structure of modules or courses that fundamentally alter the program.

8. **Modification Review Process**

- a. Major amendments in curricula shall be made at least 1-3 years after the curriculum is run or unless there is a policy change by the regulatory body, etc.
- b. Faculty responsible at the module or course level considers the need for and proposes a minor modification. The proposal is reviewed and approved by the departmental board of studies to ensure its academic suitability. After the dean's approval, the modification shall be submitted to the NUMS Academics Directorate along with supporting documents (Purpose and justification of modification, minutes of BOS meeting, and updated program curriculum). After the university statutory body approves the revised Academics Directorate, it shall share the updated curriculum with all stakeholders.
- c. Recording of modifications to the curriculum shall be mentioned in the log attached to the curriculum, along with dates and statutory body meeting minutes approving the changes.

9. Guidelines for Approval of Academic Program

When an academic program is submitted to the Academics Directorate for review and approval, the following points shall be considered:

- a. A departmental committee initially prepares the program proposal, and the relevant Dean vets it.
- b. The proposal shall ensure conformity to the requirements of the University's Curriculum Development guidelines and regulatory authorities' guidelines for accreditation / recognition of the degree / qualification.
- c. Any deviation from University academic policies shall be brought to the notice of the Director of Academics.
- d. All academic issues and matters shall be routed by the concerned Head of Department, through the concerned Dean of faculty/Head of the Institution, to the NUMS Academics Directorate. The matters relating to the establishment of any new department, proposals for introducing any new academic program or changes in the existing programs, change of program title, development or amendments of any curriculum and enhancement of seats for any of the programs or any other related academic issue shall be initiated after concurrence of the concerned Faculty Board of Studies for further consideration in AS&RB and eventual approval from the Academic Council through Academic Directorate.
- e. The Curriculum Committee of relevant subjects shall follow the NUMS curriculum map and guidelines for steps of curriculum development.
- f. The Academics Directorate will guide and provide the checklist for preparing the curriculum per NUMS, accreditation bodies and HEC requirements.
- g. After preparation, this curriculum shall be approved in the Faculty Board of Studies meeting chaired by the respective Dean. The Dean shall send this curriculum duly signed to the NUMS Academics Directorate. The Academics Directorate will scrutinize the documents per the checklist for developing curriculum "**Annexure-B.**" Every curriculum will be approved by the AS&RB/ NUMS Coordination Committee and the Academic Council through the Academics Directorate.
- h. For the Master's or PhD programs, after approval from ACM, the department shall forward the requisite documents for getting HEC's NOC for the launch of the program to Academics Dte for scrutiny. Academics Dte shall check the document as per HEC checklist "**Annexure-C**" and, after scrutiny, shall forward the documents to QA Dte, which, after ensuring the completion of the documentation as per HEC checklist, shall forward the case to the HEC. Upon receiving the NOC from HEC, the Academics Dte shall inform the concerned department to start the program. In contrast, the PQR focal person in Quality Assurance Dte shall register it on the Pakistan Qualification Register (PQR) / NUMS web portal.
- i. As per HEC's guidelines, the institution should send the documents to HEC by September 30th or March 31st to launch a program in the spring or fall semester.
- j. The HEC-approved curriculum of any academic program shall be implemented as such after the approval of the Academic Council.
- k. **Implementation.** After the program is approved, teachers will implement this curriculum, and its quality will depend on the quality of teaching and learning strategies, learning materials, and assessment.
- l. The proposal shall be sent to the Treasurer for the financial model to see the program's feasibility.

10. Infra Structure Requirements

- a. Infra-structure requirements for students, faculty, and staff shall be provided in the short, medium, and long terms to avoid any reactive situation caused by inadequate planning.

- b. A new program shall be launched if the required classroom / laboratory / computer lab is confirmed.
- c. For MBBS/ BDS. As per the regulatory authority
- d. The following are the department's HEC requirements.

Component	Nature of Requirement	Standards
Teaching and Administrative Staff Offices	Required for each University (desirable)	1 Staff room 1 Faculty office for each dept
Facilities	Hall/Lecture theatres	12 to 15 sq. ft. per student
	Number of rooms required	Minimum 2 lecture rooms per program
Laboratories/ Workshops/ PC/Internet service (Desirable)	No. of laboratories required (desirable)	At least 1 Lab. Per department with appropriate space
	Workshops (desirable)	35 to 45 sq ft. per student
	PC (desirable)	1 for 3 students in case of IT courses
	Internet service (desirable)	256 Kbytes access rate shall be provided
Libraries	Journals	Subscription to at least 15 current journals of international repute with impact factor of at least 1.00. Access to electronic journals also to be provided
	Books required	At least 1500 books from major International publishers in the relevant field

- e. **Computing Facilities:** The availability of computing facilities and their usage in the program, as well as the development of soft skills (presentation, communication skills, public speaking, etc.), should be part of the curriculum.

11. Faculty Requirement for Programs

- a. To initiate any program, a department must have at least six faculty members of relevant qualifications, including one professor, one associate professor, two assistant professors, and two lecturers.
- b. At least two (2) full-time faculty members holding PhD degrees in the relevant field shall be available/appointed to the department to launch an MS/MPhil/Equivalent program, which may be increased to three (3) if a PhD program is also to be launched in the same discipline and department.
- c. To initiate Master's programs with limited Ph. D.-qualified faculty, two relevant full-time faculty members with a Master's/ FCPS or equivalent qualification in a relevant field and at least five years' experience in a department are required.
- d. **Teacher: Student ratio (as per HEC guidelines)**
 - 1) The teacher-to-student ratio shall be 1:12, where a supervisor can supervise twelve (12) MS/MPhil/PhD students simultaneously, with no more than five (5) of these students being PhD students. Graduate teaching and supervision load shall be adjusted accordingly.
 - 2) To initiate any program, faculty details, including their qualifications and new faculty requirements, with practicable suggestions for their fulfilment, shall be submitted to the Academics Directorate for program approval.

3) Faculty details include:

- (1) Appointment order/notification
- (2) Joining report along with current statuses of employment
- (3) CV along with one recent passport size photograph
- (4) Copy of and MS/MPhil/Equivalent degrees, PhD and their translation in English (if required)
- (5) Copy of transcripts of grades of Bachelors and MS/MPhil/Equivalent degrees, PhD
- (6) Abstracts of theses of Bachelors & MS/MPhil/Equivalent degrees, PhD
- (7) CNIC
- (8) PM&DC and Faculty Registration Number (for medical faculty)

Determining the relevance of faculty to the subject/degree program. Wherever required, the subject and supervisory relevance of faculty members shall be determined based on the following:

- Qualifications including bachelor, master, and doctoral degrees
- The research includes a thesis/dissertation and published articles
- Experience consisting of teaching and administrative domains.
- The faculty Board of Studies will ascertain the relevance of the faculty.

12. Criteria to Be a PhD Supervisor

To be a PhD research supervisor, an individual shall meet the following requirements:

a. General Requirements:

- 1) A PhD from an HEC-recognized national/international university/degree awarding institute (DAI).
- 2) The research supervisor shall be given opportunities to attend and qualify for the course(s) on MS/MPhil/PhD Supervision, which should also have content on research ethics, publications, patents, etc. Such courses may include certified self-paced MOOCS or a course designed/offered by the National Academy of Higher Education (NAHE) or by a university in the following manner:

- a. Basic level course: to supervise MS/MPhil/equivalent degree students.
- b. Advanced level course: to supervise PhD researchers.

b. Regular faculty member. OR

c. **Adjunct faculty**

Adjunct faculty member or researcher at a public or private university or DAI, or position of researcher or scientist at any R&D or public/private sector organization. However, in the case of a non-faculty PhD supervisor who otherwise meets the criteria of being a PhD supervisor, they shall be taken as adjunct faculty members for a period not less than the minimum time required to complete the student's PhD research before assigning a PhD supervision. Such a person shall also provide an NOC from the parent organization.

d. **Publication Requirements:**

In addition to fulfilling the General Requirements, a PhD supervisor must publish research articles in the HEC's recognized research journals and the category specified in the HJRS for the publication year. These conditions are different for different disciplines and aim to ensure that the potential PhD supervisor is an active researcher:

1) Specific Requirements for Science and Technology: For indigenous and foreign PhDs:

- a) Within the last three years after PhD: at least one research publication in W category journal. OR
- b) Within the previous five years after PhD: at least five research publications in X category journal.

2) Specific Requirements for Social Science, Arts and Humanities and Business Education:

For indigenous and foreign PhDs:

- a) Within the previous three years after PhD: at least one research publication in W category journal. OR
- b) Within the previous five years after PhD: at least five research publications in X and Y category journal.

3) Specific Requirements for Regional and National Languages:

For indigenous and foreign PhDs:

- a) Within the previous three years after PhD: at least one research publication in X category journal. OR
- b) Within the previous five years after PhD: at least five research publications in X or Y category journal.

13. **Program Coordination**

To facilitate the students and to ensure timely and trouble-free successful completion of the program, the HoD of the respective department will appoint the following faculty members at least one month before the start of each semester.

- a. **Program Coordinator.** He/she will be responsible for liaison & coordination with all concerned.
- b. **Academic Advisor.** The academic advisor is available as the student's first line of pastoral support and advice. It is the student's responsibility to inform the Academic Advisor immediately about any problems interfering with his/her coursework or progression through the program.
- c. **Course Instructors.** He/she shall also be responsible for:

- 1) Provision of all the information regarding the course to the students, i.e. Course title, code and credit hours, objectives/ outcomes, course content, teaching methodology, assessment type and schedule
- 2) Conduct of classes as well as continuous assessment, i.e. quizzes, sessional, mid-semester examinations, practical examinations, evaluation of written course-related assignments
- 3) Maintenance of course files
- 4) Assessment results are to be submitted to the Examination Directorate after HoD approval
- 5) Course files are submitted to the concerned HOD at the end of each semester/ academic year for record-keeping purposes

14. Course File

The faculty member of each course shall invariably maintain a course file attached as “Annexure-D” covering such details of the course like syllabi, examinations, student gradations and students’ problems and measures taken for their resolution, etc., provided that once the University’s automation system is designed and applied, such files and records etc. may be maintained in the system accessible by all the authorized persons. Course Files and Dossiers of Students and faculty shall be accessible to External Experts during Program Review and Institutional Performance Evaluation Visits by the IPE Team of HEC / QA Dte.

15. Faculty Development Program

- a. To keep the faculty updated in knowledge and up-to-date with the latest advancements in their relevant fields, the department shall prepare an annual faculty development plan and religiously follow it through courses, workshops, seminars, discussion forums, etc.
- b. **Infra structure requirements.** A new program shall be launched if all the infrastructure prerequisites per the HEC checklist have been fulfilled. Infra-structure requirements for students, faculty, and staff shall be provided in the short, medium, and long terms to avoid any reactive situation caused by inadequate planning.
- c. **Computing Facilities:** The availability of computing facilities and their usage in the program, as well as the development of soft skills (presentation, communication skills, public speaking, etc.), shall be made part of the curriculum.
- d. The proposal shall be sent to the Treasurer for the financial model to see the feasibility of the program.

Review. - The existing curricula shall be reviewed every three years or earlier if they need improvement after the evaluation process and passed through the Academic Council’s approval process as aforesaid. Dean will be overall responsible for finding out if the proposed change is minor or major, as given below:

- 1) **Minor Modification:** It includes a change in a course that does not affect a program’s overall aims, objectives and outcomes. Minor modifications need approval from NUMS AS&RB. Minor modification may involve one or more of the following aspects:

- a) Changes to the title or description of a module/course.
 - b) Changes to the teaching methodology should be made to be more engaging for students, such as enhanced use of digital instructional technology, a shift in the balance of lectures and seminars, etc.
 - c) Changes in assessment tools.
 - d) Addition or deletion of modules and/or courses in a manner that does not alter a program's overall aims, learning outcomes or academic requirements.
- 2) **Major Modification:** It includes revisions in a program that alter the program's overall aims, objectives, outcomes, and academic requirements. Major modifications need a recommendation from NUMS AS&RB and approval from the Academic Council. A major modification may feature one or more of the following:
- a) Change the title of the program.
 - b) Change the program's overall aims, learning outcomes, and objectives.
 - c) Change in the duration and/or mode(s) of delivery of program (online; face to face),
 - d) Changes in the program's requirements, including student admission criteria or standards
 - e) Change of weightage at module or course level for the assessment of students
 - f) Considerable changes to the content and/or structure of modules or courses that fundamentally alter the program.
 - g) Recording of modifications to the curriculum shall be mentioned in the log attached to the curriculum, along with dates and statutory body meeting minutes approving the changes.

16. Makeup Class Policy

- a. This policy delineates the responsibilities of faculty members relating to class attendance and makeup work. It provides various makeup options that are open to faculty in case of cancelled classes.
- b. This policy applies to all faculty members of NUMS.
- c. If a faculty member misses a scheduled class, the concerned Dean will call for an explanation regarding the issue. Where the rescheduling is due to genuine reasons, e.g. University closures, medical emergencies, natural disasters, traffic jams, etc., no further action may be taken, but cases of deliberate absences without any just cause will be subject to appropriate disciplinary action. Faculty members must give the concerned university officials advanced notice of class cancellations to ensure smooth planning.
- d. In case of any holiday announced by the government, the concerned teacher shall get approval for makeup classes from the concerned HoD. The teacher will then inform the students about the time and place of the makeup class.
- e. Upon returning from closure, faculty are encouraged to consider using online technologies or making changes to the course syllabus to cover the appropriate content during regular class sessions.

17. NUMS policy for Distance Learning Programs

In case of unforeseen circumstances, NUMS programs shall be continued as such, following the distance learning guidelines of NUMS and HEC after approval from VC.

a. Online Courses

1. Students taking online courses will be provided with the same services as those taking face-to-face courses, including access to the library, financial aid, registrar, advising, technical support, etc.
2. Online courses are web-based, with no face-to-face contact between students and faculty. Courses are supported by a learning management system (LMS) where instruction occurs through either asynchronous or synchronous interaction.
3. Asynchronous interaction occurs when students and faculty are not required to be online simultaneously. Synchronous interaction occurs when students and faculty must be present simultaneously using computer or video-based communication media.
4. Academic and Examination calendars, already approved, will be followed as such.
5. The selection of technology, planning, and implementation of e-learning are the institutions' prerogatives. Based on their available resources, institutions may choose the following or other popular e-learning technologies.

- a. Computer-centered technology delivered over the Internet like E-mail learning resources/assignments, Moodle, and Google Classroom.
- b. Voice-centered technology, such as screen recorder, PPT with voice recording
- c. Video technology, such as instructional videos, Zoom and Skype

b. NUMS Learning Management System. To ensure the integrity of the courses, at least 90% of the course content must reside within the LMS and be accessible only via secure login and password unique to each NUMS student and faculty.

c. Course Quality. The concerned Dean is responsible for ensuring pedagogical quality overall.

d. Student Authentication

- 1) The student who registers in a distance or correspondence course or program is the same student who participates in and completes the course or program and receives the credit by verifying the identity of a student who participates in class or coursework by using, at the option of the institution, methods such as 1) a secure login and passcode 2) proctored examinations and 3) new or other technologies and practices that are effective in verifying student identification.”
- 2) Faculty shall identify a process for verifying that students participating in online courses are the same as those enrolled. The verification requirement must be clearly stated in the syllabus or other course documents.
- 3) Options for student verification include:
 - a) Verification of approved photo ID through a webcam
 - b) Proctoring of exams or other projects through a webcam
 - c) Synchronous or asynchronous activities requiring an approved photo ID
 - d) Other processes defined by the faculty or program

e. Guidelines for faculty

- 1) Concerned faculty shall be responsible for establishing the course learning objectives and the course curriculum, assessing the learning outcomes, and providing timely responses to students, and submitting final grades
- 2) Faculty shall be well prepared to teach online courses. Workshops shall be arranged to train the faculty for online teaching which includes skill enhancement in instructional design and pedagogy, course management strategies, assessment of hybrid and online course effectiveness, online course management system tools
- 3) Teaching an online course accounts for the same portion of a faculty member's teaching load credits as a face-to-face course.
- 4) Maximum class size is determined by the academic program delivering the course. Student demand may require maximum class size to be flexible
- 5) Faculty shall post a schedule of regular office hours that are convenient to students and meet departmental requirements. Faculty are expected to be available at the times indicated.
- 6) For online classes, faculty may make themselves available to students via phone, email, chat, video conferencing tools, or other technologies
- 7) Faculty must clearly indicate in their course materials the expectation for response to student requests.
- 8) Faculty shall respond to student emails and questions within 24 to 72 hours.
- 9) Following information shall be shared with students related to the course:
 - a) course introduction
 - b) learning objectives
 - c) grading policy
 - d) course prerequisites (if any)
 - e) course requirement or rules (if any)
 - f) learning resources
 - g) the key dates
 - h) time and venue (physical or virtual) of class meetings
 - i) lesson plan (together with the assigned readings for each lecture)
 - j) assignments/PPTs/handouts.

- f. Laboratory and Practical Instruction.** Practical instruction, including laboratory work, research projects, or internships, requires the physical presence of the student and direct supervision by or interaction with their instructors. Faculty may opt for physical presence for the student if possible or for alternative modes of engagement permissible by professional councils.

g. Guidelines for Students

- 1) Students enrolled in online courses and programs shall be provided access to student services available at NUMS, including but not limited to the library, the University UGO, and PGO.
- 2) Questions regarding technological issues can be sent to the concerned section of UGO and PGO via phone, email, or chat.
- 3) An online student orientation shall be available to students enrolled in an online course.
- 4) Students are expected to attend their online classes regularly by submitting assignments, engaging in discussion boards, completing exams, attending online chats, etc. Simply logging into the course does not count as attendance.
- 5) NUMS policies and procedures for handling grievances apply to all students, including those enrolled in distance education programs and courses.

h. Academic Integrity of Online Courses

- 1) Faculty. Online and face-to-face courses should have the same learning outcomes, descriptions, and expectations. Faculty should ensure that the quality and rigor of an online course are no less than that of its face-to-face equivalent. Faculty should take measures to deter cheating as much as possible (unique assignments, proctored exams, random test or quiz questions, plagiarism checkers, etc.)
 - 2) Students. Online students are held to the same academic integrity policies as face-to-face students. Academic dishonesty includes cheating, plagiarism, and collusion.
 - 3) Course/Faculty Evaluation. Students evaluate online courses using the course evaluation procedures for campus-based courses. Student evaluations are completed online for all classes. Results are made available to the instructor.
- i. Student Drops and Withdrawals.** Online courses follow the same regulations as face-to-face courses regarding faculty and student-initiated course drops and withdrawals.

POSTGRADUATE PROGRAMS

NUMS offers its standardized postgraduate programs for the award of degrees at Army Medical College (AM College) Rawalpindi, Armed Forces Post Graduate Medical Institute (AFPGMI) Rawalpindi, NUMS Campus and any other constituent college/ institute as may be specified by the competent authority of the University from time to time.

18. Advance Studies and Research Office (ASRO)

The Advance Studies and Research Office (ASRO) provides administrative support for all postgraduate programs, courses, faculty and students in the college/ institute. Each member of the ASRO Team is available to help and provide advice on all aspects of postgraduate programs to faculty and students in the University. This Office operates an open-door policy and is available as a first line for student and faculty support; if you have any questions, please do not hesitate to visit the Office during the office hours mentioned below. The NUMS Advance Studies and Research Office (ASRO) is in NUMS Secretariat, Rawalpindi.

Office Hours	:	08:00 AM - 04:00 PM
Telephone No	:	051- 9270676
Email ID	:	acad.dte@numspak.edu.pk

19. Graduate Supervisory Committee (PhD- GSC)

Composition

- a) Student supervisor with three years post-doctoral experience.
 - b) One PhD faculty member from the department, preferably HoD.
 - c) If HoD is not PhD qualified, other PhD faculty members may be included in the Graduate Supervisory Committee (GSC).
 - d) Two external PhD qualified members from another institute/ university/ research.
 - e) In the case of multidisciplinary research, more than two external members may be approved by the Vice-Chancellor.
 - f) Fresh PhD or FCPS/ equivalent qualified faculty members/ experts from research organizations may be appointed as co-supervisors for PhD.
- 1) This shall be appointed for each student up to the second semester. This Committee must consist of at least four PhD degree holders in the relevant field. The Committee shall have one internal member from a department other than the Supervisor and two external members from any other institution/research organization. In the case of multidisciplinary research, more than two external members may be appointed.
 - 2) Members of the **PhD–GSC** and even the Supervisor can be changed in case of difficulties or unavoidable circumstances. However, in case of any change of Supervisor, co-supervisor, or committee members, HoD shall incorporate the change in the prescribed form (Form # PG-06) accordingly and send it to the Academics Directorate after approval from the Dean.
 - 3) **Co-supervisor:** The co-supervisor must be PhD/ FCPS/ Masters qualified and appointed with the Supervisor's consent and after approval from FBS. However, MPhil degree holders can be appointed as Co-Supervisors in the Master's Program. He/she must have expertise relevant to the project and provide support to the student. While the main Supervisor is the team leader and has overall responsibility, the co-supervisors add additional expertise. Together, they have complementary expertise.
 - 4) The **PhD–GSC** meetings shall be held at least once every six months during the research phase of the PhD scholar in the department or by conference call for external members. The proceedings of SC meetings shall be recorded, and the Supervisor shall chair them. After completion of coursework, the concerned HoD shall send six monthly (bi-annual) reports of each PhD scholar in a prescribed form to the Academics Directorate.

Terms of References

- 1) Provide supervision and guidance to the student.
- 2) Evaluate the progress of the student's approved coursework.

- 3) Approve biannual progress reports of the student.
- 4) Make decisions regarding student's performance or removal from the program if academic progress is unsatisfactory.
- 5) Recommend PhD student's synopsis for approval to AS&RB.
- 6) Recommend panel of foreign examiners to AS&RB.
- 7) Review PhD thesis.
- 8) Approve the PhD candidate's thesis after an open defense.

20. PhD Programs

a. Preamble

Doctor of Philosophy (PhD) programs are being offered in basic medical sciences and pathology to impart focused research training to scholars and prepare skilled personnel with innovative research capabilities to make meaningful and productive contributions to society's socio-economic development.

b. Program Duration

The total duration of the PhD program is 3-8 years. However, under unforeseen circumstances, it may be extended to a maximum of 10 years after approval from AS&RB. The period for PhD completion will be counted from the date of admission to the final submission of the thesis.

c. General Information

Following is the approved scheme of study:

Semester Duration	18 weeks
Regular Semesters	06
Advance Course work	18 Credit Hours
Research	30 Credit Hours
Total	48 Credit Hours

d. Conduct of the Program (Annex-B)

- 1) The Dean/ Head of the Institute shall be responsible for properly implementing the program curriculum and periodically monitoring students' progress through the HoD and program coordinator.
- 2) The head of the concerned Department is responsible for overseeing the program overall and properly complying with NUMS policy regarding the conduct, assessment, and timely submission of semester assessment results to the Academic and Examination Directorates. He/she shall also assign the courses to the faculty members at the commencement of the academic session.
- 3) Scholars shall be required to submit duly filled PG forms, wherever needed, in time for the smooth running of the program. Guidelines for the timely submission of PG forms, given in handbooks, shall be followed. Postgraduate (PG) forms (Annex-C) downloadable from the NUMS website:

<https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf>

e. Degree Requirement

- a. **Residency.** There shall be a residency requirement for a period of one year.

Course Work. The 18 credit-hours coursework for this program consists of;

1. **Advanced Courses- Level 8 (09 Credit Hours)** - These postgraduate-level courses provide depth in the candidate's specialization and prepare them for research.
2. **Elective Courses - Level 8 (09 Credit Hours)**—These postgraduate-level courses allow candidates to broaden their knowledge of the general discipline that they are working in. These courses will be covered in the second semester. Students will select elective courses and intimate the Academics Directorate with the approval of their supervisor one month before the second semester.
3. Details of courses are mentioned in the curriculum.
4. After completing 18 CHs with a CGPA of ≥ 3.00 , the scholar will take the doctoral comprehensive examination.

f. Comprehensive Examination

1. Following the completion of coursework with a CGPA ≥ 3.00 , every PhD student shall be required to pass a comprehensive examination ($\geq 65\%$ marks) to be granted candidacy as a PhD researcher, provided that if the student fails to pass the thorough test, he or she shall be allowed one more attempt to take the test within three years.
2. It will test the scholar's ability to integrate and assimilate the knowledge obtained relevant to their field of research. The concerned Graduate Supervisory Committee will be responsible for The comprehensive examination in collaboration with the NUMS Examination Directorate.
3. The examination will be conducted in two parts in the following manner:

1) Part A- Written Comprehensive Examination

A panel of examiners from GSC- PhD approved by AS&RB will prepare the written paper. A comprehensive examination consists of 100 marks written on paper for 03 hours. The assessment blueprint of the Comprehensive Examination is as follows:

S No	Topics		Questions	Marks	
1.	04 examination questions, all in the student's subject area, will be distributed as follows				
	A	Core Courses	To demonstrate the understanding of advanced research methods and techniques used in the relevant field	03	03x15
	B	Elective Courses		03	03x15
2.	Research proposal		To check the adequacy of the candidate's background preparation to pursue the proposed research	01	01x10
Total			07	100	

The Controller will notify the student of the result of the Examination.

2) Oral Examination

- a. It shall be conducted only after the scholar has qualified for Part A of the Comprehensive examination.
 - b. Scholars shall submit a research proposal in the prescribed format. After the supervisor and the committee approve the synopsis, the student will submit two hard copies, which will be forwarded to the concerned Dean's Office for the synopsis defense.
 - c. The scholars shall present their synopsis before the PhD–GSC, with the Dean as Chair. Approval of the synopsis shall be obtained using the prescribed evaluation score form.
 - d. The scholar has to defend their synopsis as Part of this oral examination. The Oral Examination Committee shall determine by majority vote. The assessment will be graded as Pass/ Fail. Only pass scholars will be allowed to proceed to the doctoral research.
 - e. PhD–GSC may recommend changes in the synopsis, and the scholar shall repeat the presentation within the stipulated time. A majority vote shall finalize the synopsis's approval.
 - f. If any observation/ revision in the research title/ project is needed, the student will resubmit it through the concerned institute with all the above formalities after approval from FBS.
 - g. Upon a failure in the oral Part, each committee member will submit a duly signed comment page, which will document the reasons for failure, to the Academic and Examination Directorates of NUMS through the concerned Dean. A duplicate copy of these shall also be provided to the student.
 - h. IRB approval shall be taken wherever required.
 - i. A scholar who has passed the comprehensive examination shall be deemed to have become a candidate for PhD degree.
- g. Research.**
1. Every PhD scholar starts research under their supervisor and keeps the graduate supervisory committee members updated on the research progress. They are required to complete 30 credits of PhD research within the stipulated time.
 2. All candidates must produce a PhD dissertation consisting of original high-impact research. They shall write the dissertation in the NUMS-prescribed format. They will submit the draft to their supervisor, who will review it thoroughly. The Supervisor must conduct a plagiarism test on the dissertation before submitting it for evaluation. The Supervisor shall check the similarity index using Turnitin software, which should be <19% per HEC's guidelines.
 3. If satisfied, the supervisor will recommend that the thesis be submitted for evaluation. The scholar will then submit the prescribed dissertation verification form

- (Form #PG-13) with two copies of the soft-bound draft dissertation to the concerned Dean's Office through HOD. NUMS Academic Directorate will be intimated through acknowledgment receipt through the Dean's office.
4. PhD—GSC shall evaluate the Ph.D. dissertation. The dissertation Evaluation Report, in the prescribed form, shall be sent to the Dean within four weeks.
 5. If any PhD member suggests any amendment to the GSC, the supervisor shall ensure that necessary alterations are properly made in the dissertation.
 6. After the dissertation is evaluated by The Graduate Supervisory Committee, it shall be evaluated by external experts, as approved by the Advanced Studies and Research Board (AS&RB), who may be either.
 - PhD faculty member from the world's top 500 universities ranked by the Times Higher Education or QS World Ranking in the year corresponding to the dissertation evaluation year OR
 - Pakistan-based Distinguished National Professors, Meritorious Professors from any national university, professors from top universities ranked by HEC, or professors from any Pakistani University having a minimum H-Index of 30 for Sciences, 15 for Social Sciences or 8 for Art & Humanities as determined by Web of Science. OR
 - At least one external expert qualifying any one of the conditions mentioned above if the PhD candidate has two W category papers from their dissertation research in a peer-reviewed journal that is classified by the HEC in category W for Sciences and X or above for Social Sciences
- 1) Supervisors of all PhD programs shall send names of at least two/ three external experts during the research phase of their PhD students to the Academics Directorate. The following general guidelines shall, at least, be observed while selecting an external evaluator:
- Relevance of Expertise: in the same or related fields as in the dissertation.
 - No Conflict of Interest: personal, financial, or professional stakes in a particular decision or outcome.
 - Objectivity: capable of making unbiased evaluations.
 - Diversity: in terms of geography, culture, professional backgrounds, etc.
 - Reputation: must be good in the field, with a track record of fair and thorough evaluations.
 - Availability: should have the time and availability to review the dissertation.
 - Professionalism: capable of conducting themselves professionally and respectfully throughout the evaluation and defense process (if applicable).
 - Communication: capable of providing clear and constructive feedback on the dissertation.
 - Confidentiality: capable of maintaining confidentiality and protecting the intellectual property of the dissertation.
 - Compatibility: well-versed with the research methodology, approach, and theories used in the dissertation.
2. The dissertation will be sent through the Dean's office to the Academics Directorate, which will send it to external expert/s approved by AS&RB.
 3. If external experts suggest any amendments, the supervisor shall ensure that necessary alterations are properly made in the dissertation. If external experts give a satisfactory report, it will be considered approved. However, if the report is not received from external experts within two months, the dissertation shall be sent to a second or third external expert from the approved list.
 4. The Dean shall review and send the external expert/s report through the Academics Directorate for approval by the Advanced Studies & Research Board.

5. The candidate shall present a research paper in a seminar, national, or international conference and publish an abstract in the conference proceedings. The candidate shall submit evidence of participation to the Academics Directorate.

h. Dissertation/Thesis defense:

- a) There shall be an open defense of PhD dissertation.
- b) Public Announcements shall be made on the university website so that anyone interested can participate.
- c) The final defense of the dissertation shall be in the presence of the Dean and PhD- GSC.
- d) The dissertation will be graded using the prescribed evaluation score form. However, its scoring will not be considered for calculating the CGPA.
- e) The PhD–GSC may approve the dissertation as such, recommend minor or major changes, or not approve it and repeat the presentation if required.
- f) The final approved bound copies shall be submitted to the HoD through the supervisor within one month after the dissertation/thesis defense. The date of defense notification will be taken as the degree award date.
- g) Two hard copies and a soft copy shall be shared with Acad Dte. Acad Dte, in turn, will send, after scrutiny, one hard copy to the Exam directorate for the award of the degree and another copy to the library.

i. Research Publication. For award of PhD degree, a PhD researcher shall be required to publish research articles meeting the following criteria:

1. At least: Sciences; One research article in W category journal. In Social Science, One research article in X category journal or two research articles in Y category journals
2. The PhD researcher shall be the first author of these publications.
3. The research article shall be relevant to the PhD researcher's research work.
4. The article shall be published after approval of the research synopsis.
5. The article shall be published in a relevant research journal.

- a. **Guidelines for Synopsis & Dissertation/Thesis Writing.** (Available on NUMS website). Each PhD researcher shall write a doctoral dissertation reflecting the research's relevance, credibility, effectiveness, and legitimacy. The word count of the dissertation shall be min. 30000. The dissertation must be an original and innovative contribution to knowledge that contributes to solving socioeconomic problems. To improve the quality of a doctoral dissertation, some regulations have been suggested in the following areas:

Selection of Research Area. The research area of the PhD researcher shall:

- 1) Correspond to the community needs at regional and local levels and comply with the priority national research agenda.
- 2) Reflect on the basic and pure research.
- 3) Signify emerging areas of research that coincide preferably with sustainable development goals (SDGs)

- b. **Quality in Reporting.** The quality of presentation and reporting in the dissertation shall reflect the following characteristics:

- a. The document is well written.
- b. The contents are balanced, well organized, appropriately styled, clearly structured, and well covered, and
- c. The document is free from grammatical and spelling errors and flawed terminology.
- d. Minor shortcomings have been addressed, such as inaccurate use of acronyms and clumsy-looking sentence structure.
- e. Quantitative research proposals must include a valid statistical design for data analysis.
- f. Formatting shall be compatible with international standards.

- c. **Methodological Quality.** Ensuring the technical soundness of their PhD dissertations is integral to producing PhD researchers capable of conducting research independently. The following guidelines shall be useful in making the PhD research methodologically sound:

- 1) **Guidelines ensuring the quality of Qualitative Research:** A PhD research dissertation based on Qualitative Research methods should satisfy at least the following questions:
 - a) “Does the research, as reported, illuminate the subjective meaning, actions and contexts of those being researched?”
 - b) “Is there evidence of the adaption and responsiveness of the research design to the circumstances and issues of real-life social settings met during the course of the study?”
 - c) “Does the sample produce the type of knowledge necessary to understand the structures and processes within which the individuals or situations are located?”
 - d) “Is the description provided detailed enough to allow the researcher or reader to interpret the meaning and context of what is being researched?”

- e) “How are the different sources of knowledge about the same issue compared and contrasted?”
- f) “Are subjective perceptions and experiences treated as knowledge in their own right?”
- g) “How does the research move from a description of the data through quotation or examples to an analysis and interpretation of the meaning and significance of it?”

2) Guidelines ensuring the quality of Quantitative Research: A PhD dissertation with Quantitative Research methods should satisfy at least, the following questions:

- a) Reliability - are the results repeatable?
- b) Validity - does it measure what it says?
- c) Internal validity - do the research results indicate what they appear to be?
- d) External validity - can the results be generalized to other settings (ecological validity) and to other populations (population validity)?
- e) Replicability - are the results of the study reproducible?

3) Appropriateness of the Methods to the Aims of the Study

- a) The alignment of the research approach and methods is necessary to achieve the research objectives. Therefore, a PhD dissertation, at least, shall:
 - b) Reflect a fair proportion of the latest knowledge of contemporary techniques and methods about study objectives.
 - c) Contain detailed and easily understandable discussions regarding the applied methods and techniques.
 - d) Justify the use of methods and techniques to achieve study objectives.
 - e) Show evaluation of results obtained regarding study objectives. And:
 - (1) The methods and techniques used should justify the results obtained.
 - (2) The obtained results should support the study objectives.

4) Relevance to the Policy and Practice. The research should have significantly answered questions related to policy and practice in that area, establishing its usefulness and usability. Accordingly, a PhD dissertation, at least, shall:

- a) Reflect judicious evaluation of study results in relation to policy-related aims and goals undertaken while starting the research.
- b) Discuss the practical implications of the study results in association with the developing practices in that area.
- c) Establish the usefulness of the study results for devising policy as stated in the beginning.
- d) Discuss how the resulting policy would be useful for the organization/society. And:
 - e) The study output should be significant enough to be published or

patented.

- f) The assessment of the results performed by the author must not be superficial and lacking substance.
- j. **Award of MS/MPhil Degree During PhD Studies:** A student who completes coursework and passes the comprehensive examination but is unable to defend a PhD synopsis/research proposal or does not complete the required research for obtaining a PhD degree within the specified timeframe may be granted a graduate-level diploma/certificate/transcripts or another MS/MPhil upon completion of regulatory authority requirements.
- k. **Award of Doctoral Degree:** A PhD scholar must fulfill all of the following requirements for award of PhD degree:
 - a) Completed advanced course work of 18 CHs with CGPA \geq 3.00
 - b) Passed comprehensive examination
 - c) Research work of 30 CHs
 - d) Research paper(s) as its first author during their doctoral studies in an HEC-approved W category in all disciplines except social sciences (1X or 2Y category) in the HEC Journal Recognition System (HJRS)
 - e) Satisfactory dissertation evaluation report/s from external expert/s
 - f) Successful open defense of the dissertation
- l. **Reporting Requirements.** The following documents shall be submitted to the HEC after the completion of studies:
 - a. A soft copy of PhD Dissertation for inclusion in PhD Country Directory and attestation of degree by the HEC.
 - b. PhD Country Directory Proforma, signed by the Principal Supervisor, Controller of Examination and the Vice Chancellor.

21. PhD Supervisor Honorarium

a. Purpose

To award honorarium to faculty supervising PhD Students at NUMS.

b. Objectives

- 1) To give incentive to faculty for supervising PhD Students at NUMS
- 2) To increase research input at NUMS

c. Eligibility Criteria

- 1) The supervisor, who is faculty member at NUMS and main supervisor of PhD student.
- 2) The synopsis of supervisor's PhD student has already been approved by AS&RB.
- 3) During supervisory period, the faculty member shall maintain the status of HEC approved supervisor.

d. Award Honorarium Procedure

- 1) Rs. 50,000/- shall be paid after PhD Synopsis approval from AS&RB
- 2) Rs. 50,000/- shall be paid on successful internal evaluation of PhD thesis and sending to abroad for evaluation.
- 3) Rs. 50,000/- shall be paid on PhD degree notification

e. Procedure for Payment

- 1) The PhD Supervisor send request through the Dean to Academic Dte for payment after fulfilling the requirement.
- 2) Academics Dte shall process the application after verification and forward to Treasurer for payment to the supervisor.

22. Reporting Requirements

The following documents shall be submitted to the HEC after the completion of studies:

- a. A soft copy of the PhD Dissertation for inclusion in the Country Directory and attestation of degree by the HEC.
- b. PhD Country Directory Proforma, signed by the Principal Supervisor, Controller of Examination and the Vice Chancellor.

23. Master Programs

Preamble

NUMS offers Master's programs in different disciplines of basic medical, clinical, biological and social sciences at its constituent institutions to create high-quality human resources in the country.

Students shall be required to submit duly filled PG forms, wherever needed, in time for the smooth running of the program. Guidelines for the timely submission of PG forms, given in handbooks, shall be followed. Postgraduate (PG) forms (Annex-C) downloadable from NUMS website:

<https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf>

Through the concerned HoD, the supervisor shall send six monthly (bi-annual) reports of each student, after completion of course work, in a prescribed form to the Academics Directorate.

a. Program Duration

The duration of all Master programs is 1.5-4 years. The period will be counted from the commencement of classes to the final submission of the thesis.

b. Graduate Supervisory Committee for Masters Programs

This shall be appointed for all students up to the semester. It shall consist of four members (two internal from the department, including the student's supervisor, and two external members from another institution/research organization) for medical programs to fulfil the PM&DC requirement. However, in other Master programs, one external and two internal members will constitute the MP–GSC.

In multidisciplinary research, the Pro Vice-Chancellor (Academics) may approve more than one external member.

c. Conduct of Program

- 1) The Dean/ Head of the Institute shall be responsible for properly implementing the program curriculum and periodically monitoring students' progress through

the HoD and program coordinator. The Head of the concerned Department is responsible for overall supervision of the program and proper compliance with NUMS policy for the conduct, assessment, and timely submission of semester assessment results to the Academic and Examination Directorates. He/she shall also assign the courses to the faculty members at the commencement of the academic session.

- 2) Students shall be required to submit duly filled postgraduate forms (**Annex-A**) downloadable from NUMS website <https://numspak.edu.pk/upload/media/RevisedPGForms20201603945999.pdf> to be used for postgraduate studies.
- 3) Students will submit their feedback at the end of each semester.
- 4) The course-related assignments shall be given to the students by the faculty members and quizzes, sessional and mid semester examinations shall be conducted internally by the HODs through faculty members. Proper course file shall be maintained. Internal assessment results shall be compiled in this regard and furnished to the Examination Directorate. A student may improve or repeat the courses as per NUMS policy. End semester examinations shall be conducted by the Examination Directorate.
- 5) The supervisor through the concerned HoD/ Dean shall send bi-annual report of each student in prescribed form to the Academics Directorate by the end of third semester and fourth semester if research work is not completed.

- 1) **Guidelines for Synopsis & Dissertation/ Thesis Writing.** Available on NUMS website/ PG Students handbook.

d. Degree Requirement

- 1) **Course work.** Minimum course work requirement for Master program is 24 CHs. Details of course work of each program is mentioned in the curriculum.
- 2) **Research.** 6 -10 CHs depending on program requirement. However, in clinical subjects, student may opt for research or article publication.

3) Synopsis Approval.

- a) Every student is required to submit a research synopsis to the department in the first month of the third semester after approval from the supervisory committee (Form # PG-09).
- b) **Guidelines for Synopsis & Dissertation/ Thesis Writing.** Scholars shall submit a research proposal in the prescribed format. These are available on the NUMS website.
- c) The students shall present their synopsis before the Head of the Institution/Dean chairs the MP-GSC, and approval shall be given on the prescribed evaluation score form. (Form # PG-10).
- d) The MP-GSC may recommend changes in the synopsis, and the student shall repeat the presentation within the stipulated time. A majority vote shall finalize the approval of the synopsis. (Form # PG-11).
- e) If any observation/ revision in the research title/ project is needed, the student will resubmit it through the concerned institute with all the above formalities after approval from FBS.
- f) IRB approval shall be taken wherever required.

- e. **Research Bench fee.** NUMS will pay Rs. 100,000/—to MPhil/ MS students for research purposes on a case-to-case basis after recommendations from FBS.

f. Research Work.

- 1) The research work will be carried out under the direct guidance and supervision of the supervisor, who will keep the members of the MP-GSC abreast of the progress of the research work as per the procedures prevalent in the institution.
- 2) Research work should be completed within the stipulated time. However, the committee may extend the time for concurrence from the Academics Directorate, provided the supervisor certifies that a student has completed 50% of the research work.
- 3) All students shall write the thesis in the NUMS-prescribed format.
- 4) The word count of the thesis shall be a minimum of 15000.
- 5) **Thesis Preparation/ Submission.** Every student should write their thesis in the prescribed manner and format. After careful review and similarity index check using Turnitin software, which should be <19% per HEC's guidelines, the concerned supervisor will recommend the thesis for final evaluation. The student will submit the prescribed thesis verification form (Form #PG-13) with two copies of the bound draft thesis to the concerned Dean's Office through the concerned departmental head.
- 6) **Thesis Evaluation.** MP–GSC will review and send the thesis evaluation report in the prescribed form to the Dean's office within four weeks. If MP–GSC gives a satisfactory report, the student shall be allowed to proceed with the defense of the thesis examination. The changes/ amendments, if suggested by the examiners, shall be incorporated into the thesis.

g. Thesis Defense.

- 1) After receiving a satisfactory thesis evaluation report, the Dean will schedule a date for the final defense of the thesis under intimation to the Academics Directorate/ Controller of Examinations/ Director QA and Heads of the concerned College or Institute.
- 2) The student will be allowed to go for thesis defense only if they have completed 24 CH of coursework with CGPA > 2.50
- 3) The final defense of the thesis shall be in the presence of the Dean and MP–GSC. The grading of thesis research shall be done using the prescribed evaluation score form. However, its scoring shall not be considered for CGPA calculation.
- 4) The examiners may approve the thesis as such, recommend minor or major changes in the dissertation, and not approve and repeat the presentation if required.
- 5) The final approved bound copies shall be submitted to the HoD through the supervisor within one month after the thesis defense. The date the Dean signs will be taken as the degree award date.
- 6) Two hard copies and a soft copy shall be shared with Acad Dte. Acad Dte, in turn, will send, after scrutiny, one hard copy to the Exam directorate for the award of the degree and one copy to the library.
- 7) The Academics Directorate will check the documents required for the degree award and forward the dossier, result and bound copies of the thesis to the Examination Directorate for record and gazette notification.

h. Research Paper.

In MPhil, MS and MHPE programs, each student must submit one research paper acknowledging the concerned journal to the corresponding author in any of the PM&DC/HEC-approved journals.

Two Master's students may be allowed to fulfil the publication requirement after approval of FBS.

- i. **Practicum (On-the-job Assignment).** The goal of the practicum is to provide a structured and supervised opportunity for the student to apply the theories, principles, knowledge, and skills learned in the classroom in a practice setting. The practice experience occurs in a carefully selected health services organization approved by the Programme Coordinator and is supervised by faculty and an immediate supervisor/mentor. This takes into account the transition from education to professional practice.

Prerequisites and Requirements:

- Students must have completed all the coursework and defended their dissertations before registering for the practicum.
- In consultation with the practice site or organization, the student must develop a short, formal proposal of the work or project to be accomplished by the student during the assignment.
- The student will complete the assigned hours of practicum experience with the selected organization.
- The student will write a well-constructed report (10-15 pages, excluding appendices) detailing their experience.
- An immediate supervisor/mentor of the participating organization will evaluate the student.

Role of Immediate Supervisor/Mentor

- Responsible for the student's learning during the practicum.
- Serves as a role model for the student and advises the student routinely.
- Periodically consults responsible faculty on student's progress.
- Completes a student evaluation form at the end of the practicum

j. **Award of Master's degree.**

The student must have completed total credit hours of coursework with a CGPA >2.50 and research work of 06 - 10 credit hours followed by a successful thesis defense. In MPhil/MS/ MHPE, one research paper was submitted to any of the PM&DC / HEC-approved journals with acknowledgement of the concerned journal to the corresponding author. However, in Master of Clinical Programs, students may conduct 06 credit hours of research followed by a thesis or submit one research paper in any of the PM&DC/HEC-approved journals.

24. Postgraduate Diploma/ Certificate Programs

- a. NUMS postgraduate certificate programs are designed to help students attain the latest skills and knowledge in the field, thus preparing them to advance in their careers.
- b. A course coordinator shall be appointed within one month of 1st semester who will coordinate the course with the NUMS Academic Directorate.
- c. The department will plan/assign the courses to its faculty to be taught during each semester. The respective faculty member(s) will be responsible for examining/evaluating the course (s) throughout the semester.
- d. The faculty will continuously assess students throughout the semester through a combination of methods, including sessional, midterm, case presentations, and

- viva.
- e. The respective faculty shall take and compile the students' sessional and mid-semester tests. The results will then be sent to NUMS as an internal assessment.
 - f. The end semester exam will be conducted at the end of each semester using the NUMS exam Dte.
 - g. A CGPA of 2.5 will be the qualifying score for a diploma/ certificate award.

UNDERGRADUATE PROGRAMS

Undergraduate Studies Office

The University has established Undergraduate Studies Office in the Directorate of Academics to deal with all affairs relating to MBBS/BDS and BS programs in the light of instructions and guidelines of PM&DC, HEC and other regulatory authorities. It acts as a hub of formulation and implementation of all policies of the University on undergraduate programs.

These Offices operate an open door policy and are available as a first line for students and faculty support; if you have any questions, please do not hesitate to visit the office during the office hours mentioned below.

The NUMS Undergraduate Studies Offices is situated in NUMS Secretariat, Rawalpindi.

Office Hours	:	08:00 AM - 04:00 PM
Telephone No	:	051- 9270676
Email ID	:	acad.dte@numspak.edu.pk

25. Annual Based Programs - MBBS/BDS

a. Mission Statement

Each institute shall develop its mission statement aligned with the mission of NUMS. The mission of the institute and mission of NUMS shall be documented in curricular document of the institute, its website and displayed on the premises.

b. General features of the program

- 1) Competencies shall be aligned with PM&DC mentioned competencies to produce seven-star doctor which are skillful, knowledgeable, community health promoter, critical thinker, professional and role model, researcher and leader
- 2) NUMS curriculum shall be outcome based, patient centered, community relevant, promotes health and prevents disease
- 3) NUMS will share the academic calendar, outcomes with content, assessment blueprint and guidelines for implementation of the curriculum of each year with its

constituents and affiliates. However, modality of teaching will be customized to suit the institutional logistics

- 4) Each college will develop its curriculum implementation plan aligned with NUMS guidelines and share with NUMS Academic Dte. It may differ in different colleges and will depend upon their available resources and limitations.
- 5) All NUMS colleges will provide study guides of each module to the students
- 6) Modular Coordinator- responsible for conduct of teaching and assessment during each module. To be appointed by HoDs in coordination with HPE team
- 7) Clinical Coordinator - responsible for placement, conduct of teaching and assessment during clinical rotations
- 8) Each college will be required to maintain a record of all academic activities of every student. Portfolios of each subject will be maintained separately. These will be developed by each institute in alignment with their implementation plan but in compliance with NUMS curriculum policy
- 9) Faculty of the institutional Departments of Health Professions Education in collaboration with the department, will advise and guide all curricular activities in addition to conducting need-based faculty development workshops
- 10) Student portfolio shall be maintained in the departments in which students will give their feedback either by name or anonymously. Feedback may be taken at the end of module, online and informal student feedback during the running module
- 11) Faculty suggestions if any, for improvement of training may be incorporated in the next rotation
- 12) Distribution of contact hours and subjects shall be in accordance with PM&DC guidelines. Total contact hours for 5 years' program are minimum 6000 hours whereas total contact hours for 4 years' program are minimum 4765 hours and may be changed in future
- 13) Distribution of instructional contents into theory and practical is as follows:

Subject	Theory (%)	Practical (%)
All basic sciences	50	50
Pre -clinical sciences (Pharmacology and Therapeutics, Forensic Medicine, Community Medicine, Pathology)	40	60
Clinical sciences	30	70
Internship /house job	0	100

- 14) Each academic year will consist of at least 36 weeks from opening of the session to the commencement of professional examination
- 15) Longitudinal themes (Behavioral Sciences, Research Methodology, Leadership and Professionalism, Infection control and Patients safety) are an integral part of the curriculum
- 16) Islamiat and Pakistan Studies are compulsory subjects taught throughout the year in first and second year respectively
- 17) Students shall be encouraged to participate in community services and extracurricular activities

- 18) Apart from attending daily scheduled sessions, students shall engage in self-directed learning to achieve the desired objectives
- 19) Students shall be encouraged to enroll in elective courses in summer vacations
- 20) Educational Strategies

- a) Strategies employed shall be upon the discretion of the institute and shall be subject to its individual context (needs and limitations).
However, NUMS proposes Small Group Learning as the dominant strategy of the curriculum, with opportunity for student centeredness, self-directed learning. These may include case based learning and discussion, tutorials and PBLs etc. Large Group Interactive sessions, practical sessions, presentations, Self-Directed learning and Directed Self Learning may be other modalities.
- b) Integrated teaching session shall be offered in each module for better understanding and application of concepts.
- c) Teaching strategies used in the clinical rotations shall depend upon the requirement of that specialty. Commonly used strategies proposed are small groups, morning reports, case reports, Mini-CEX, case write-ups, bedside teaching, teaching in outpatient, inpatient and OR settings among others

c. House Job Policy

- 1) Every student on completion of his/her degree of the MBBS/BDS shall be required to undergo one-year house job before full registration with the PM&DC.
 - 2) Each constituent/ affiliated medical college shall be responsible to create house job vacancies annually in its teaching hospital equivalent to its approved annual intake
 - 3) Only the graduates provisionally registered with the Council as medical and dental practitioner shall be eligible for house job.
 - 4) House job structure / Salary. As prescribed by PM&DC HR/ Concerned institute
- d. Award of degree** - For the award of MBBS/BDS degree, student shall have passed all professional examination held at the end of each year with minimum 50% marks in each subject (50% each in theory and practical separately) in every professional exam. However, in clinical subjects, student should pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately. It is also mandatory to pass Islamic Studies / Ethics and Pakistan Studies with minimum 33% marks before final annual professional of MBBS/BDS.

26. BS Programs

- a. Duration of four years' undergraduate degree program is 4- 6 years whereas for five years' undergraduate degree program is 5 years, further extendable for one year with the approval of Faculty Board of Studies.
- b. There are 8-10 regular semesters each of 18 weeks' duration and summer semester of 9-week duration for deficient/repetition of courses (max 08 credits hours). However, Medicine and those requiring Clinical work can offer max 6-9 credit hours.
- c. Course Load per Semester for Regular Full-Time Students shall be 15-18 Credit Hours and total number of courses per semester shall be 4-6 (not more than 3 labs/practical courses)

- d. All four years' undergraduate degree programs are composed of 124-140 credit hours whereas credit hours for five years' programs are 160 - 180.
- e. The students must earn 78-87 credit hours in a sequence of introductory, intermediate and advance level courses of the major disciplines. The courses for Social and Basic Sciences disciplines will consist of 60-65% of curriculum towards the discipline specific areas
- f. Students shall write a project report/research report of 06 credit hours individually on a topic approved by faculty in the final year. Project proposal shall be submitted to Academics Directorate after approval from concerned dean. However, guidelines for synopsis and research report writing will be defined by respective department
- g. Students may undertake internship in the relevant discipline of maximum 3 credit hours. At the end of internship, he/she will submit a report at the end of internship
- h. Project/ internship report shall not be counted for the calculation of CGPA. However, this shall be required for the award of the degree
- i. For completion of the degree, the minimum qualifying CGPA for Bachelor programs is 2:00
- j. In case a student secures less than 2.00 CGPA at the end of final semester. s/he may be allowed to get readmission in one or more courses, in which his/her grade is below C, along with the forthcoming semester, provided that s/he is not debarred under the CGPA improvement regulation and time duration specified for that program
- k. Maximum number of courses that student may be allowed to repeat in an eight semester's degree program is less than and equal to six (≤ 6). Course may be repeated/improved in summer semester or when the course is offered in maximum two attempts
- l. The student will be limited to three attempts (two repeats) per course with a grade being issued for the third attempt
- m. In case any student wishes to enroll for one more course beyond 18 credit hours s/he may be allowed by institution in either of the two cases – a) If his/her CGPA is above 3.5 and b) The student needs the course to graduate on time
- n. Template for 4-Year Degree Program shall be as follows:

Sr#	Category	No. of courses	Credit Hrs
1	Compulsory courses	09	25
2	Discipline Specific Foundation courses	09-10	30-33
3	General courses to be chosen from other departments	07-08	21-24
4	Major courses including research project/internship	11 - 13	36-42
5	Elective courses within the major	04	12
Total		40-44	124-136

27. Associate Degree Programs

- a. Associate degree program of AHS is generally of two years' duration based on semester system with four semesters each of sixteen to eighteen weeks. Duration of program may be extended to further one year on recommendation of dean.
- b. Credit load per semester will be between sixteen to eighteen credit hours. The number of courses per semester range between four to six.
- c. Total numbers of Credit hours are 65- 68.
- d. Following are the course requirement as prescribed by HEC: -

S. No	Categories	No. of courses	Credit Hours	%age of Total Credit Hours
1.	Compulsory Requirement (No Choice)	6	18	27%
2.	Discipline Specific Foundation Courses	4	12	18%
3.	Major Courses including Project/Internship	10	30	46%
4.	Electives within the major	2	6	9%
Total		22	66	100%

- e. For completion of the degree, the minimum qualifying CGPA for Associate Degree program is 2.00
- f. In case a student secures less than 2.00 CGPA at the end of final semester. s/he maybe allowed to get readmission in one or more courses, in which his/her grade is below C, along with the forthcoming semester, provided that s/he is not debarred under the CGPA improvement regulation and time duration specified for that program

CHAPTER V ASSESSMENTS & EXAMINATIONS

1. NUMS shall follow semester- based examination system for all postgraduate and non-medical undergraduate academic programs each having two regular semesters in the academic year, Spring semester from January till May and Fall semester from August till December. However, in special circumstances program can be started other than above mentioned time with approval from VC. Each regular semester shall be for 18 weeks' duration (16 weeks of teaching & learning and 2 weeks for examination). There is additional summer semester of 09 weeks with weekly contact hours for a course being double of the regular semester
2. In the beginning of a semester, the teacher of each course shall guide the students about the successful completion of the course requirements.
3. Minimum 75% (85% for Nursing) attendance in each course is mandatory. In case of deficient attendance, student has to repeat the course either in summer semester or whenever the course is offered. Where required, the course instructor shall report student's absences to the HoD.
4. Student may opt for deficient/ improvement courses in summer semester or whenever the course is offered. However, in deficient/ improvement courses, the student is required to complete all formalities applicable to repetition of a course, i.e., sessional, mid semester examination, project, assignments, quiz, etc and End Semester Examination.
5. **Taking Alternative Elective/Optional Course**
A student may take an alternative elective for repetition with the approval of Dean or HOD. A student's transcript shall show the grades of both the courses. However, the better grade will be used in the computation of CGPA.
6. **Noncredit courses.**
Courses may be taught as non-credit courses as well. The assessment marks of these courses shall not contribute towards CGPA.
7. **Assessment Management**
 - a. **NUMS Examination Directorate:**
 - 1) The Controller of Examinations shall be responsible for the preparation of the examination calendar and the conduct of all examinations during an academic year.
 - 2) Date sheet of all examinations shall be prepared by Controller of Examinations in consultation with the constituent & affiliated institutions at least three months prior to the commencement of final examination.
 - 3) The University will publish the examination schedule of written and practical examinations on NUMS website with a copy to concerned institution.
 - 4) End Semester examination in semester-based programs shall be held in 18th week of semester initiation.

- 5) In case of unforeseen circumstances, Controller of Examinations may change the date sheet and assessment modalities (online).
- 6) Examination Directorate NUMS will be responsible for the collection of all exam questions/cases, scheduling and conduction of moderation of written question papers, practical exams marking of final examination and compilation of results as per NUMS and regularity authority guidelines.
- 7) Examination Directorate will conduct post Hoc of all exams and schedule Post Hoc meetings with members of NDHPE Team before the announcement of results.
- 8) Exam Directorate shall share template prepared by NDHPE with the faculty for construction of MCQ, SAQ, SEQ and OSCE/ OSPE.
- 9) Exam Directorate will be responsible for maintaining, enhancing and periodic review of NUMS Question Bank.
- 10) Examination Directorate NUMS shall ensure that the candidates' documents are correct and shall forward admit cards to the institutions, at least two weeks before the commencement of examination for issuance to individual students.
- 11) Declaration of Result: Every effort shall be made to declare the result of annual based examination within one month of the last practical examination and within two weeks in semester- based examination after hoc.

b. Institutional Examination Cell:

Every institution will establish Institutional Examination Cell (IEC) headed by Institutional Deputy Controller (IDC) of Examinations, who will be responsible for:

- 1) Ensuring development of MCQs and SAQs/SEQs/OSCE/OSPE by the concerned faculty and their maintenance in the institutional bank.
- 2) Ensuring conduct of pre per and post exam quality assurance measures in collaboration with institutional DHPE/Assessment Cell
- 3) Maintenance of record of internal assessment of annual based programs and continuous assessment in semester- based programs
- 4) Maintenance of record of attendance of each candidate (minimum 75 % except in Nursing programs where it is 85 %)
- 5) Submission of internal assessment of each student at least 2 weeks prior to final professional/end semester examination to Examination Dte NUMS
- 6) Submission of examination application form and prescribed fee to the Examination Dte NUMS at least 6 weeks before the commencement of the examination
- 7) End Semester Examination: Maintenance of papers secrecy, conduct of annual/ end semester examination and onward submission of papers to the Examination Dte NUMS

c. Departmental Board of Studies.

Departmental Board of Studies will be responsible for:

- 1) Development of Table of Specification (TOS) and assessment blueprint
- 2) Ensuring quality of assessment of each program through pre per and post exam measures
- 3) Monitoring the internal/ continuous assessment, and finalization of result ensuring transparent scoring of NUMS.

- 4) Ensuring that course files/ dossiers of students are properly maintained.
- 5) Recommendation of examiners to the Examination Dte NUMS for final professional/ end semester examination as per NUMS and regulatory authority guidelines.

8. Policy Guidelines

- a. NUMS considers student assessment as a means of refining its academic programs and to improve student learning and performance.
- b. Multiple assessment methods are necessary to capture all or most aspects of clinical competency and any single method is not sufficient to do the job. Therefore, following assessment tools may be selected by the faculty:
 - 1) For knowledge, concepts, application of knowledge ('Knows' and 'Knows How' of Miller's conceptual pyramid for clinical competence): context-based MCQ, short answer questions and Essay questions
 - 2) For 'Shows How': multi-station OSCE/ OSPE, Long case (observed and structured) and Short case
 - 3) For performance-based assessment ('does'): portfolio or log book
- c. All assessment blue prints shall give clear educational rationale for adopting proposed forms of assessment. However, number of questions may vary from program to program
- d. All assessment blue prints of PG programs shall be submitted to Academic Directorate through respective Dean for further approval from AS&RB, and UG programs from NUMS Coordination Committee. Template for assessment blueprint is attached (**Annexure-G**)
- e. Assessment tools shall be appropriate and match learning outcome being assessed
- f. Level of difficulty of all questions shall be mentioned as Recall and/or Application
- g. All information regarding scheduling and nature of examinations shall be known to the students in time
- h. The performance of each student in a course will be assessed periodically throughout the semester to check as to how well the students' learning outcomes are being achieved and how effectively are the teaching standards being maintained
- i. **Semester Based Programs:** Continuous/Internal assessment (60%) and End Semester Examination (40%) shall be cleared separately with minimum 50% marks. However, the cumulative result shall be calculated as per NUMS Grading Policy
- j. These assessments will have different weighting as given below, that contribute towards the overall assessment in percent marks.

Nature of Examination	Weightings	
Quizzes	5%	60 %
Sessional examination	10%	
Mid semester examination	25%	
Practical/Assignments/Presentation	20%	
Final semester examination	40%	40 %
Total	100%	

- k. Ratio of theory and practical will be adjusted as per their credit hours division e.g. in case of course 4(3+1), the weightage of practical shall be 25%
- l. **Quizzes/ Sessional Tests/ Mid-Semester Examinations**
- 1) Assessment tool for quizzes, sessional and mid semester exams shall be decided by the course instructor.
 - 2) Quizzes, sessional exams and Mid-Semester examination of each course shall be evaluated by the respective course instructor. Results will be sent to the Controller of Examination through Institutional Examination Cell.
 - 3) Whenever a student misses a mid-semester examination/ sessional test for reasons acceptable to the Departmental Board of Studies, a make-up test may be arranged within the 04 weeks.

m. **Practical/Assignments/Presentation**

- 1) Practical examination is the responsibility of the course instructor and DBS
- 2) Assessment tool for practical exams shall be decided by the course instructor as per the course requirement. Proposed assessment tools for different programs are:

For PG Programs (Basic Sciences & Pathology)		
Assessment	40	20%
▪ Critical Appraisal of Article/ Assignment	10	05%
▪ OSPE/ Practical/Viva/Assignments/ PPTs	30	15%
For Clinical Sciences Programs		
Assessment	40	20%
▪ Portfolio/ Log book	10	05%
▪ OSCE (at least 07 stations)/ Short case/ Assignments/ Presentations etc	30	15%

n. **Final Semester Examinations:**

- 1) The end semester theory paper of each course shall be prepared and evaluated by the panel of examiners approved by the Controller of Examinations.
- 2) Paper shall be developed by the Departmental Board of Studies as per the requirement of their subject based on NUMS template out of two options as per the subject requirement.
- 3) There will be no supplementary/ special examination for end semester exam and if a student fails in a course, he/she is required to repeat it.
- 4) Whenever a student misses End Semester Examination due to a reason acceptable to the Dean/ HoD provided his/her attendance is not less than the program requirement, he/ she can appear in the examination whenever offered.
- 5) The HoD and Institutional Deputy Controller of Examinations shall supervise and oversee the conduct of examination in the departments.

9. **Grade Point Average**

- a. The student's final assessment shall be done by Grade Point Average (GPA).
- b. For calculation of GPA, absolute grading on the scale of 4.00 points shall be used
- c. Following grade calculations are used as per HEC policy for use by all concerned:

S No	Percentage	Grade Points	Grade	S No	Percentage	Grade Points	Grade
1	85 & above	4.00	A	23	63	2.22	C
2	84	3.93	A-	24	62	2.11	
3	83	3.86		25	61	2.00	
4	82	3.80		26	60	1.88	C-
5	81	3.73		27	59	1.77	
6	80	3.66		28	58	1.70	
7	79	3.60					
8	78	3.52	B+	Below 58		0.00	F
9	77	3.46					
10	76	3.40					
11	75	3.33					
12	74	3.24		B			
13	73	3.16					
14	72	3.08					
15	71	3.00	B-				
16	70	2.88					
17	69	2.77					
18	68	2.66	C+				
19	67	2.58					
20	66	2.50					
21	65	2.42					
22	64	2.33					

d. Computation of GPA/ CGPA and Degree Award

GPA is a figure ranging from 0.00 to 4.00 used to indicate the performance of a student in the semester. It is calculated as follows:

$$\text{Semester Grade Point Average (GPA)} = \frac{\text{Sum over all courses in a semester (course credit hrs x grade point earned)}}{\text{Total Semester Credit Hours}}$$

$$\text{Cumulative Grade Point Averages (CGPA)} = \frac{\text{Sum over all courses in all Semester (Courses Crd Hrs x Grade Point Earned)}}{\text{Total Semester Credit Hours}}$$

- e. Minimum qualifying CGPAs for PhD and MPhil/ Master programs shall be 3.00 and 2.50 respectively and for Undergraduate programs shall be 2.00

10. Academic Deficiencies.

A student who obtains one or more of the following grades in the semester result shall be considered academically deficient:

- a. Semester GPA less than 2.00 for PG programs and 1.70 for UG programs
- b. Earns CGPA less than 3.00 for PhD, 2.50 for MPhil/Masters programs and 2.00 for UG programs *in any semester other than first semester* or after completion of the coursework
- c. 'F' grade in any course
- d. 'I' (incomplete) grade in any course.
 - 1) **Award of Grade "F"**. "F" grade is awarded on the basis of:
 - a) Academic failure i.e. below 1.70 GPA in any course of PG programs and below 1.00 in any course of UG programs
 - b) Attendance less than 75% in any course (85% for Nursing programs)
 - 2) **Incomplete "I" Grade**. An incomplete "I" grade will be awarded by the faculty only in exceptional cases only when where beyond the control of a student such as serious accident, family tragedy, serious health ailment, etc. The grade will be approved by the concerned Dean provided the attendance of a student is not less than 75% (and 85% in case of nursing program). The student will be given a proper grade after examination as per NUMS grading policy without prejudice to the previous grade "I". In case a student fails to make up the required score, S/he will be awarded an "F" grade

11. Recommendations for Academic Deficiencies

The cases of academically deficient students shall be discussed in the Departmental Board of Studies meeting and issue one of following recommendations where applicable, as mentioned below:

- a. Warning - issued to the student by the concerned HOD
- b. Probation.
- c. Withdrawal.

For probation and withdrawal, recommendations shall be sent to Controller of Examination NUMS who will notify it in the result.

- a. **Warning**. A PG student should be placed on warning under the following condition at the time of declaration of semester result by Controller of Examination of the University:
 - 1) Semester GPA less than 2.00
 - 2) CGPA 2.50-3.00 for PhD and between 2.00 - 2.50 for MPhil/Masters programs
 - 3) Failing in any paper(s)
 - 4) While on warning, a student is to:
 - a) Contact concerned faculty for guidance.
 - b) Improve semester work comprising home assignments, laboratory reports, quiz, mid semester and the marks obtained

- b. **Probation.** A PG student should be placed on academic probation under the following conditions:
- 1) CGPA less than 2.00
 - 2) Maximum two probations
 - 3) While on probation, a student is to:
 - a) Contact concerned faculty for guidance.
 - b) Improve semester work comprising home assignments, laboratory reports, quiz, mid semester and the marks obtained

c. **Withdrawal**

A student is recommended for withdrawal from the University on the recommendation of Dean/ HOD, by Registrar Directorate NUMS subject to any of the conditions listed below:

- 1) Earns four F grades or more in first semester only cannot complete his/her degree requirements within the maximum stipulated time, even if s/he utilizes the summer semester.
- 3) A student who remains absent for more than 45 days continuously without valid reasons
- 4) Withdraw from a Particular Course
- 5) Students can withdraw from a particular course with the consent of the concerned dean. Students can withdraw from a maximum of 01 courses in one semester. This should be within four weeks after the start of classes.
- 6) More than two academic probations.
- 7) Students with CGPA less than 1.70 in two consecutive semesters of the program even after attending summer semester. However, he will be eligible to seek re-admission if applied for in the next available admission season. Re-admission will be allowed only once on payment of full admission fee
- 8) PhD students if fails twice in the comprehensive examination or fails to qualify coursework requirements including comprehensive examination within 03 years.
- 9) On consistent unsatisfactory academic performance when reported by the supervisor of the PhD students
- 10) A student can seek withdrawal from any program at any stage of his degree on his own request duly recommended by supervisor and for PhD students by Supervisory Committee of the Institute/ College and take readmission within two years from the stage on which withdrawal was taken

Note: *If a student is likely to be withdrawn on academic deficiencies, s/he will be duly warned and counseled.*

d. **Repeating Courses**

- 1) If a student gets 'F' grade, he will be required to repeat the course or its recommended alternate, if any. However, "F" grade obtained earlier will also be recorded on the transcript. A student who fails in a subject, and after repeating fails again the number of F's counted in this case will be one "F" only

- 2) It is the student's responsibility to clear the failed / dropped courses, subject to availability of resources at the respective institution and approval of Dean / Associate Dean / HoD
- e. **Improvement of CGPA.** A student may repeat a course, within the maximum permissible duration, to improve his/her CGPA subject to the following provisions:
 - 1) Course may be repeated/improved in summer semester or when the course is offered.
 - 2) The student should register for the course(s) to be repeated after formal permission from the respective HoD.
 - 3) The student shall not be allowed to improve his/her CGPA after completion of the degree.
 - 4) The terms and conditions of repeat courses shall be the same as per regular courses.
 - 5) Students may repeat a course with grade "C" & below, however if a PhD student's CGPA is less than 3.00, he/ she may repeat course/s with grade "B-" & below to qualify for comprehensive examination.
 - 6) A student may repeat up to three (03) courses in the PG program. In such a case, both the course and the grade obtained will be recorded on the transcript, however, only the better grade shall be calculated in the CGPA. In case of CGPA improvement, it would be recorded with (Imp) on the transcript
 - 7) A student can repeat the course twice if he desires to improve the grade.

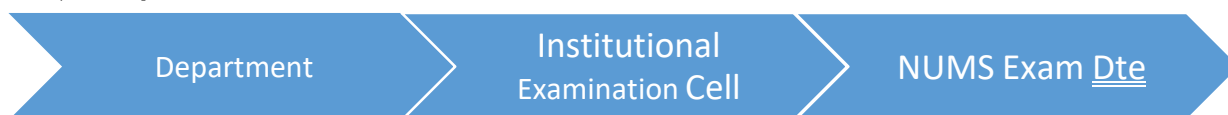
12. **NUMS MBBS/ BDS Program**

NUMS MBBS/BDS programs are annual based and their assessment will be both formative and summative.

- a. **Formative Assessment.** It will be done throughout each course to provide feedback to the students and help them identify learning gaps. Some of these assessments will be used only to inform students where they stand against benchmarks
- b. **Summative Assessment.** They will be in the form of module exams, End of the block (EOB) exams, ward tests, end of clinical rotation, OSCE/ OSPE, pre annual and professional exams.
- c. **Internal Assessment (IA).**
 - 1) **Basic/Preclinical subjects.**
 - a) There shall be two end of blocks and one pre-annual examination in basic and pre-clinical years, which contributes towards the weighting of internal assessment i.e. 20% in professional examination
 - b) Assessment strategies used in End of the block (EOB) exams & pre annual exams and professional assessments shall be the same
 - 2) **Clinical subjects.**
 - a) Students shall be assessed at the end of clinical rotations in years III - V which will contribute to the internal assessment (20%) at the end of final year.
 - b) Assessment at the end of clinical rotations will focus on application of knowledge, competence in specific clinical skills, and appropriate professional attitude. Satisfactory performance shall be required in each of these areas for progress and promotion.

- c) The duration and content of remedial work for students not meeting the prescribed requirements shall be determined by the faculty in accordance with weakness identified in a student's learning or clinical experience.
 - d) In the clinical rotation/ clerkships, failure in assessment requires the student to repeat the exam. Passing marks are 50%
 - e) Attendance of 75% and satisfactory performance in the rotation/clerkship in each year is mandatory.
 - f) The result of all the class tests which contribute towards internal assessment will be displayed to the students during an academic year
 - g) The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year.
 - h) The university will only accept revised internal assessment of a relegated students only if college will inform the university about the joining of student for attending the classes in time.
- 3) **Standardization of Internal Assessment.** Institutional Examination Cell (IEC) shall be established in all NUMS colleges/institutes to oversees and manages the examination-related activities including implementing policies and TOS, preparation of end of blocks and pre-annual exam papers, ensuring the smooth conduct of exams, supervising the evaluation process, record keeping and timely submission of results to COE NUMS. 01 x Assistant Controller Examination (ACE) will nominated by NUMS in each institute

4) **Responsibilities**



- a) **Department's Responsibilities:** -
 - 1) HOD and senior faculty will develop blocks Table of Specifications (TOS) in consultation with institutional HPE faculty and undertake continuous assessment of each student
 - 2) Prepare the EOB and pre-annual examination papers. MCQs / SAQs /SEQs will be part of written assessment, while OSPE / OSCE (including short and long cases) and Viva will be part of practical/clinical assessments.
 - 3) Provide feedback to the students after each EOB & Pre-annual exams.
 - 4) Submit EOB & Pre-annual papers and results to Assistant Controller of examination
 - 5) Nominate clinical coordinator for the maintenance of clinical subjects' internal assessment record.
 - 6) Conduct of End of Block practical / clinical rotation exam during the allocated time for practical class/ clinical rotation.
- b) **Assistant Controller of Examination (ACE) NUMS:** - Shall be responsible for all examination / assessment related processes of the institution including: -
 - 1) ACE will manage the examination-related activities in coordination with HODs & HPE faculty, including timely preparation of EOBs and pre-annual

exam papers, conduct of exams, supervision of evaluation process and record keeping.

- 2) Submit results of EOB & Pre-annual exams to Exam Directorate NUMS within 02 wks after the conclusion of Pre annual exam
- 3) Pre, Per and Post-exam quality assurance in assessment through HODs and HPE faculty as follow:

Pre, Per & Post exam QA Processes for MCQ Bank		
PRE-EXAM MEASURES Role of department & educationists	PER-EXAM MEASURES Role of IEC	POST-EXAM MEASURES Role of statistician & educationists
<ul style="list-style-type: none"> • No of items - alpha • Content validity-through blue-printing • Ensuring training of item writers • Moderation for quality check of items 	Conduct of exam (printing, handling, secrecy, invigilation) handling of any mishap (cheating and action taken)	<ul style="list-style-type: none"> • Descriptive stats inc. alpha • Post hoc analysis (including p-value, point biserial & distractor analysis) • Feedback to examiner & closing the loop

- a) Provide evidence of approved blueprints of internal assessment made by colleges, question papers of internal exams, answer sheets, scores of internal assessments, post hoc results with evidence of decisions taken, minutes of assessment committees meeting and training workshops evidence during college inspection by NUMS Inspection Directorate team
- b) Shall be reporting to Controller of Examinations (CoE) NUMS on all exam related professional matters.

c) Institutional QEC Head.

Formal feedbacks from students and faculty shall be part of routine evaluations surveys conducted each year at the end of academic sessions. This shall be communicated to NUMS Academics, QA and Exam Directorates.

d) Format of Theory paper & Practical

Modules	Topic	Theory		Practical	
		Number of MCQs (70%)	SAQ/SEQs (30%)	OSPE/OSCE/ Practical	Structured Viva
		Recall: Application to be decided by the faculty	Number: 7 - 10	Min 10 stations	At least 10 questions

13. Professional Exam

- a. A student shall fulfill the following conditions to be eligible to appear in a professional examination:
 - 1) Registered in NUMS and has studied the prescribed courses in the academic year.
 - 2) Have at least 75% cumulative attendance in each subject at the end of academic year. Students' presence will be marked in all sessions.
 - 3) Paid the prescribed examination fee.
 - 4) Paid all college dues for the current academic year
 - 5) Have no major disciplinary case during the current academic year
 - 6) NUMS professional examinations will be held only twice for all academic sessions i.e. Annual and Supplementary
 - 7) There will be five professional examinations for MBBS and four for BDS students
 - 8) The examination will comprise of a theory paper and practical/clinical examination as per PM&DC regulations and the approved assessment blueprint of NUMS
 - 9) The weighting of the professional examination will be 80 %, each for theory and practical, which will contribute towards the final scores of the subject
 - 10) An aggregate of 50% in Theory and 50% in Practical of that subject will be declared pass in that subject. However, in clinical subjects, student should pass in clinical exams / OSCE (with 50% marks) and unobserved stations (with 50% marks) separately
- b. Professional examination will be conducted by NUMS at the end of the academic year. The examination will be block-wise
- c. **Theory paper**
 - 1) The Theory Paper of 100/150 marks shall be of 3-hours duration, held under the arrangements of the university. However, for 50 marks paper, it will be of 02 hours' duration.
 - 2) The theory paper of all the MBBS & BDS prof exams during the forthcoming exam cycle of 2023 will be held under the existing format of 50 % MCQs and SEQs / SAQs, each. The format will be adjusted to 70 % MCQs and 30 % SEQs (with SAQs abolished) and applied with effect from exam cycle 2024. However, their ratio, weightings and number of questions may be changed from time to time after the approval of Academic Council.
 - 3) Faculty shall specify level of difficulty i.e. Recall and/ or Application for MCQs in assessment blue print
 - 4) Each MCQs shall have four options (3 distractors and one correct answer)
 - 5) Paper setting shall be done as per approved assessment blueprint
 - 6) In unforeseen circumstances, it may be conducted online following all procedures, if approved by the academic council
- d. **Practical / Clinical Examinations**
 - 1) The Controller of Examination will approve the faculty to serve as the internal & external examiners.
 - 2) Practical/clinical examination shall be held as per the date sheet issued by the University
 - 3) Candidates may be divided into groups in the clinical/ practical examinations

- 4) In practical/ clinical examination, OSPE/ OSCE, Viva Voce or any other tool may be used as decided by Departmental Board of Studies
- 5) Institutional Assistant Controller of Exam NUMS shall overall be responsible for quality assurance in annual practical examinations in coordination with internal/ external examiners and HPE faculty.
- 6) TOS of practical/ clinical exam shared by NUMS to the medical colleges shall be followed as such.
- 7) There shall be minimum 02 Internal and 02 External examiners for the conduct of practical / clinical exam as per the approved TOS in MBBS Program.
- 8) For BDS Program there shall be minimum 01 Internal and 01 External examiners who will adjust timings of OSCE/ OSPE & Viva.
- 9) Number of examiners may be decreased if the faculty is deficient in particular subject, after approval of Controller of Examinations NUMS
- 10) The entire layout of professional practical exam shall be structured as per the approved table of specification
- 11) To attain the standardization, each student shall be examined by all the internal as well as the external examiners and scored separately.
- 12) Each of the Internal and External examiner shall be allocated specified topics and number of questions having equal weightage.
- 13) OSPE / OSCE stations with stipulated marks, more than the average marks of other stations, shall be assigned to the External examiner(s) rather than the Internal examiner(s).
- 14) Viva Voce. Each student shall be given at least 5 minutes by each examiner for assessment whereby 10 questions with broad content coverage shall be asked out of which 3, 5 and 2 shall be Easy, Moderate and Hard, respectively.
- 15) Panel of Internal and External Examiners shall furnish comprehensive result of prof practical /clinical exams to Exam Directorate NUMS, through Institutional Assistant Controller of Examination, within 48 hours of the conclusion of the exams. This shall include the summary of the result supported by all original and complete documents including question paper and OSPE / OSCE station wise hand written examiners' award lists.

e. Pass Marks

- 1) Pass marks for all subjects except Islamic / Pakistan Studies, shall be 50 % in theory and practical, separately.
- 2) Pass marks for Islamic / Pakistan Studies shall be 33 % which, however shall not be counted towards final scoring of the professional examination. Non- Muslims may opt for ethics instead of Islamic Studies. However, it is mandatory to pass Islamic Studies / Ethics and Pakistan Studies before final annual professional of MBBS/BDS
- 3) Result will be announced after the conduct of post exam analysis of students' scores on the exam and may be normalized based on the post hoc data
- 4) No grace marks shall be allowed to any student in any examination.

f. Supplementary Examination. The interval between a supplementary examination and the previous professional examination shall not be more than two months.

g. Re-Takes in MBBS & BDS Professional Examinations. Consequent to Pakistan Medical & Dental Commission (PM&DC) Medical & Dental UG Education (Admissions, Curriculum & Conduct) Regulations 2021 - (Amended) dated 4th June 2021, the following Policy for Re-takes in MBBS & BDS Professional Examinations is framed:

- 1) Permissible chances (availed or un-availed)
 - a) 1st & 2nd Prof MBBS - 04 chances each
 - b) 3rd & 4th Prof MBBS - 06 chances each
 - c) 1st Prof BDS - 04 chances each
 - d) 2nd & 3rd Prof BDS - 06 chances each
 - e) Final Prof MBBS & BDS - Unlimited
- 2) Failing to pass the professional exams after the permissible number of chances (availed or un-availed), a student shall stand terminated from the respective academic program and the seat shall be considered vacant which shall be filled under the migration policy
- 3) Only annual and a supplementary exam shall be held in an academic year while an additional re-take in the same academic year shall be offered for final prof MBBS & BDS
- 4) A student failing in the supplementary exam and in the additional re-take exam for final prof MBBS & BDS, shall be considered detained, to appear in the failing subject(s) with the next session.
- 5) The seat of a detained student shall not be filled through transfer or any other means and at all times the total strength of students in the institution shall not exceed the gross total seats allocated for all applicable academic years of the program.
- 6) If a detained student desires to improve upon his / her internal assessment of the failed subject(s), he/she shall be required to attend a minimum of 75% of classes in the failed subject(s).
- 7) The exam fee shall be permissible from the detained student(s) for the subject(s) only in which the student(s) shall be appearing.

h. Indiscipline in Examinations

- 1) Any candidate found guilty of following matters; his/her case will be submitted to Unfair Means Cases Committee constituted by the University. This committee will be constituted of 02 senior faculty members, Director of student's affairs, headed by senior Professor of the University.
 - a) Removes a leaf from his/her answer book, the answer book shall be cancelled.
 - b) Submits forged or fake documents in connection with the examination.
 - c) Commits impersonation in the examination.
 - d) Copies from any paper, book or notes.
 - e) Mutilates the Answer Book.
 - f) Possesses any kind of material, which may be helpful to his/her in the examination.
 - g) Does anything that is immoral or illegal in connection with the examination and which may be helpful to him/her in the examination.

- h) Refuses to obey the invigilation staff or refuses to follow the instructions issued by the University in connection with the examination.
 - i) misbehaves or creates any kind of disturbance in or around the examination center.
 - j) Uses abusive or obscene language on the answer script.
 - k) Possesses any kind of weapon in or around examination center.
 - l) Possesses any kind of electronic device which may be helpful in the examination
- 2) His/her case shall result in penalties keeping in view the nature and intensity of offence.
 - a) Cancellation of paper
 - b) Suspension from programme for one semester.
 - c) Heavy and light Fine
 - d) Expulsion forever from the University.
 - e) Any other.
 - 3) All serious cases of indiscipline shall be subjected to enquiry by the Unfair Means Cases Committee will decide that the student will have to appear in summer semester/with regular semester for the cancelled paper provided that nothing will restrict the inherent powers of the Vice Chancellor to award any suitable punishment in any disciplinary case without reference to the said committee
 - 4) While dealing in student disciplinary cases, the principles of natural justice shall not be compromised under any circumstances even in the situations where such cases are decided on summary basis.
 - 5) If a student is not satisfied by the decision of the Unfair Means Cases Committee, s/he can submit his/her appeal within a week after the decision of the Committee to the Vice Chancellor whose decision will be final.

i. Rechecking of Examination Script

The answer book of a candidate shall not be re-assessed under any circumstances.

- 1) Whereas the re-checking does not mean re-assessment/re-evaluation/re-marking of the answer book. The Controller of Examination can arrange for re-checking of examination script by any faculty member from the relevant discipline on the complaint/request of students. The Controller of Examination or any officer or rechecking committee appointed shall see that:
 - a) There is no computational mistake in the grand total on the title page of the answer book
 - b) The total of various parts of a question has been correctly made at the end of each question
 - c) All totals have been correctly brought forward on the title page of the answer book
 - d) No portion of any answer has been left un-marked
 - e) Total marks in the answer book tally with the marks sheet
 - f) The hand-writing of the candidate tally in the questions/answer book.
- 2) The candidate or anybody on his behalf has no right to see or examine the answer books for any purpose

- 3) The marks of a candidate could even decrease in light of (a) (3) above. In the event of reduction of marks, the record shall be corrected accordingly and revised transcript will be issued.

j. Medical Certificate

Medical certificate from a registered medical practitioner duly endorsed by the University Medical Officer is acceptable for the examination purposes

k. Permission of Writer for Special Students:

- a. A visually impaired student may be allowed to attempt examinations on Braille/ computer/ any other specialized means of facilitation.
- b. In case a student is physically handicapped/visually impaired, he may in advance apply to HoD with acceptable proof of disability or impairment at least two weeks before the start of examination, for permission to engage a writer in tests/ examinations. Such student shall be allowed 45 minutes (maximum) extra time for a question paper.
- c. The qualification of the person who acts as writer of a handicapped student must be at least one step lower than that of the student.

l. Damaged/ Lost Answer Script:

In an exceptional case where an answer script is damaged, lost or destroyed due to unavoidable circumstances, the student concerned may be given following options:

- 1) Average marking shall be awarded to the student in that subject/ course
- 2) In case of final examination, if the candidate desires so, s/he shall be given another chance as a special case to take examination in that subject/ course in the next examination and no examination fee shall be charged from the student
- 3) In case of internal assessment, if the candidate desires so, s/he shall be given another chance as a special case to take the Make-up assessment in that subject/ course in the same academic session

m. Matters Related to Degree/Transcript Award

1) Transcript.

- a) Examination Directorate may issue two types of transcripts i.e. interim and final.
- b) Interim transcript shall be issued to such students who have not completed their programs. It will show the grades of all semesters which a student has completed along with GPA/ CGPA. It will show program status as well. In MBBS/BDS, it will show marks/ percentage of all subjects in every professional examination
- c) Final transcript shall be issued to the students who have completed their degree requirements showing complete academic record of the students along with GPA/ CGPA in semester based programs and show marks/ percentage of all subjects in every professional examination. It will show program status as well with academic honor, if any.
- d) The final transcript shall at least cover the following information:

2) Front:

- a) Name of student, father's name, date of birth, registration number/ roll number.
- b) Name of the program.

- c) Date of admission into degree program.
- d) Semester wise break-up with dates.
- e) Subjects detail along with credit hours.
- f) Type of enrollment - full time or part time.
- g) Picture of the applicant be printed on transcript date of completion of degree requirements.
- h) Date of completion of degree requirements.
- i) Mode of study - regular or private or distance learning.
- j) Online result verification key/ID (front side at the end of the transcript).
- k) GPA/CGPA and overall percentage against earned CGPA (at the end of the front side of transcript) for semester based programs.

3) Back

- a) Basic Admission Requirement of the Programme
 - b) Previous Degree held by the Student along with Institution Name
 - c) Credit Hours Exempted/ Transferred if any/ applicable.
 - d) CNIC No. for Pakistani and Passport No. for Foreign Students
 - e) Grading System must be mentioned on Back Side of the Transcript
 - f) Charter Date of the University/ DAI may be mentioned
 - g) Name of Campus/ College be mentioned along with HEC Permission Date
 - h) Signature of Issuing Officer(s) (Front and Back Side at the end of the Transcript)
 - i) The degree/ diploma/ transcript must have the water-mark seal on it.
- 4) **Duplicate Transcripts.** The students may request for additional or duplicate copies of transcripts on payment of prescribed fee. Each type of transcript shall depict transcripts definition and legend of grades on its reverse side

n. Award of Degree

Degrees shall be issued against payment of prescribed fee.

- 1) Urgent degree can be issued upon the request of student on payment of special fee, if any.
- 2) Duplicate degree may be issued (with completion of all requirements) to a student in case the original degree is lost/damaged or in case of change in the name of candidate. The duplicate degree shall be signed by the Controller of Examinations only

o. Standing Committee - Use of Unfair Means in University Examinations

Composition

- | | | | |
|----|-----------|---|------------------------------|
| 1) | President | : | Director Academics |
| 2) | Members | : | Director Legal |
| 3) | Secretary | : | Dy Controller of Examination |

Terms of Reference

To investigate and make recommendations about any disciplinary matter/complaint against students in the jurisdiction. Secretary of the committee is to convene the meeting whenever required and submit the report to the competent authority for approval within seven days of occurrence of the incidents

CHAPTER VI HUMAN RESOURCE POLICIES

1. Recruitment & Selection Policy

a. Purpose

The purpose of this policy is to ensure a transparent and fair hiring process that can assist the HR personnel to select the right candidate on the basis of merit and relevance with the job.

b. Scope

This document is relevant and applicable to HR personnel and all the stakeholders of Recruitment and Selection process.

c. Policy

All appointments (recruitments) in the University shall be made by the Vice Chancellor only on contract basis for such duration extendable for such further terms as he may consider appropriate.

d. Appointments and allied matters:

- 1) Unless otherwise warranted under any special or exigent circumstances, no appointment shall be made without prior advertisement in the manner approved by the Vice Chancellor and every such advertisement shall, inter alia, specify the full description of the post, main functions or duties, minimum qualification, nature and minimum extent of experience, maximum age limit, duration of the employment contract etc.
- 2) The applicants who have applied for any advertised post shall be short-listed so as to enable only such candidates to undergo the selection process as have credentials commensurate to the requirements advertised in respect of the post. Interview letters (which includes electronic intimation) shall be issued to the short-listed candidates at least two weeks before the interview date. Schedule of interviews may be announced in advance in a manner deemed appropriate.
- 3) Selection of an employee against every post shall be made through an interview by a selection committee constituted by the Vice Chancellor for the purpose. The Vice Chancellor may at his discretion chair any or all interview sessions of any committee.
- 4) Before proceeding for any selection process for any post or class of posts, the committee may decide upon a numerical formula allocating weightage to each category of the credentials provided that the weightage for interview shall not be less than fifty percent of the total marks decided about the post or class of posts.
- 5) No travelling, daily or lodging allowance shall be admissible to any person appearing for the interview by the committee.
- 6) On conclusion of the interviews, the senior most member of the committee shall compile post-wise results proposing the names of the candidates recommended

for appointment through orders from the Vice Chancellor.

e. Qualifying requirements for different posts:

- 1) The Directorate of Human Resource shall develop a scheme for minimum qualifying requirements for each category or class of posts with due consultation with the domain heads under whose jurisdiction the posts fall and under approval from the Vice Chancellor.
- 2) The minimum qualifying requirements already decided and applied for the appointments so far made shall be treated as already standardized and incorporated in the scheme accordingly.
- 3) The scheme of minimum qualifying requirements developed as aforesaid shall be subjected to approval by the Vice Chancellor where after it shall be considered as final till such time any amendment or change is made therein either under the direction or approval from the Vice Chancellor.
- 4) The Pro- Chancellor may on his own or otherwise alter or relax any minimum qualifying requirement in case of any post or class of posts.

f. Duration of employment contracts:

- 1) Except for the posts whose appointment tenure whether extendable or not is specified in the NUMS Act, 2015, the period for contract employment against other posts shall be decided by the Vice Chancellor, which may be up to two years extendable.
- 2) Services of daily wage employees may be hired for such shorter period or periods as may be approved by the Vice Chancellor from time to time and any daily wage employee or class of employees can be taken over to contract employment in the manner and subject to such conditions as may be like wise approved by the Vice Chancellor.

g. Procedure and Responsibilities

Formalities for Appointments:

- 1) All the interviews shall be taken through personal appearance of the candidate and candidate's identity shall be confirmed before the interview provided that the Vice Chancellor may allow in any case or class of cases, the interview or interviews to be taken through the applications of modern computer/digital/visual technology like Skype, WhatsApp, Viber, FaceTime, and WebEx, etc., or other modes of online interviews.
- 2) Every candidate shall be required to furnish copies of his duly attested academic degrees, educational certificates and other documents including equivalence certification from the concerned competent authority and CNIC etc., at the time of filing his application.
- 3) Where any candidate has been successfully selected for any post, genuineness of his academic degrees, educational certificates, equivalence certifications and experience documents shall be subjected to verification from the concerned quarters.

- 4) Where any forgery has been detected in consequence of the verification as aforesaid, the employment contract shall ipso facto stand cancelled ab-initio and the employee involved therein shall immediately surrender to the University all the amounts which he may have taken on account of salary or other emoluments, failing which a criminal case shall be registered against him on the complaint of the University on the expiry of fifteen days of his such failure.
- 5) The Vice Chancellor may:
 - a) subject any contract employee or class of employees to any suitable orientation course or training before the regular assumption of duties;
 - b) specify a written test as one of the pre-requisites for contract appointment against any post or class of posts;
 - c) order to keep any employee or class of employees on probation for a specified period before his or their suitability is decided for confirmation into contract appointment(s);
 - d) cancel any employment contract by giving one month's advance notice to the concerned employee;
 - e) suspend without cancellation any employment contract for a specified period on the grounds or for the purposes beneficial either to the university or to the employee's professional standards or credentials subject to the condition that no financial benefit or advantage shall be extended to the employee during the suspension period;
 - f) order or allow temporary appointment of any other person against a post falling vacant during the suspension period of any employment contract; and
 - g) Extend the employment contract period even prior to the expiry of the validity period thereof.

2. Hiring of Human Resource for NIASR

a. Objective.

The objectives for prudent Human Resource hiring are enumerated below: -

- 1) Hiring of appropriately qualified and experienced Human Resource will play a pivotal role for achieving defined objectives of NIASR
- 2) Hiring process to include timely initiation of demand when there is a need and is in conformity with the PC-I requirements as to designation, qualification, experience, field of specialty and the numbers.
- 3) Hiring process for NIASR should ensures compliance to Government Rules with regards to Project appointments (PC-I) and NUMS Organizational Rules, framed on the subject for achieving transparency, equal opportunity and merit.
- 4) All NIASR hirings need to be processed by its Project Team and duly approved by Project Management Board on recommendations of Project Management Board Working Group.

b. Hiring Procedure:

The Human Resource Hiring procedure inter-alia to include the following: -

- 1) Initiation of demand by respective directorate for hiring the HR duly vetted by P&D Dte, showing:
 - a) Particulars of HR (i.e. Name of Post, Qualification & Experience, Age limit and Number of Posts) with minimum PC-I requirements.
 - b) Availability of Funds
- 2) P&D Directorate will also solicit approval of PMB and forward consolidated draft requirement to HR Dte, well before time.
- 3) HR Directorate will reconfirm that the demand is accordance with the PC-I
- 4) HR Directorate to place advertisement as per Government Rules (at least in one English and one Urdu National newspapers having wide circulation) on the subject for the hiring and also placing advertisement on NUMS website. NIASR/ Project Scrutiny committee comprising following will scrutinize the data of all applicants for eligibility criteria as per the requirement given in the advertisement and shortlist the most suitable 5-6 candidates against each post for interview by the Selection Board: -
 - a) Dean MDS - Chairman
 - b) Director - Member
 - c) Project Director - Member
 - d) Concerned HOD/ Technical Expert - Member
 - e) Director HR - Member
- 5) On receipt of shortlisting from scrutiny committee, HR Dte will arrange Meeting of Selection Board for selection of most suitable candidate/ reserve alongwith Pay Package. Subsequently, Interview letter will be issued to shortlisted candidates. Composition of Selection board for NIASR project positions is as under: -
 - a) Pro VC (Acad) (in case of Faculty positions) - Chairman
 - b) Pro VC (Adm) (in case of Non-faculty positions) - Chairman
 - c) Provost SP&D - Member
 - d) Dean MDS - Member
 - e) Director P&D - Member
 - f) Project Director - Member
 - g) Treasurer - Member
 - h) Concerned HOD/ Technical Expert - Member
 - i) Director HR - Secretary
- 6) HR Dte will get Selection Board proceedings signed by the President and Members of the board.

- 7) HR Dte will process Minute Sheet of Selection Board proceedings through Director P&D for seeking formal approval of VC NUMS.
- 8) On final approval by VC NUMS, HR Dte will issue the letter(s) of appointment to the selected candidates to join NIASR Project positions with info to Director P&D.

3. Hiring of Visiting Faculty

- a. Policy/ SOP on Engagement of Visiting Faculty at NUMS duly approved by Competent Authority for implementation by all concerned
- b. In this regard, concerned Deans/ HoDs are requested to forward Selection Board Proceeding Minutes of interviewed candidates (at least 3 against each post as per Format along with following documents after interviewing the candidates to HR Directorate on Minute Sheet at least 4 weeks prior to commencement of the semester: -
 - 1) List of total faculty members in the department along with their Teaching Load for current semester (including already engaged visiting faculty)
 - 2) Justification for hiring of additional visiting faculty
 - 3) CVs duly affixed with photograph of candidates shortlisted for interview along with their Score Card Matrix (Template being forwarded after approval)
- c. Composition of the above mentioned Selection Board will be as under; -
 - 1) Concerned Dean - Chairperson
 - 2) Concerned HoD - Member/ Secy
 - 3) 1 x Associate Professor - Member
 - 4) 1 x Assistant Professor (Other Faculty/ Dept) - Member

4. Policy/ SOP on Engagement of Visiting Faculty:

- a. NUMS has launched various undergraduate programs. In order to ensure smooth conduct of these programs, all efforts are being made to hire suitable faculty in time.
- b. In case full time faculty is not available, visiting faculty will be engaged as per following guidelines (as & when required) -
 - 1) Concerned HoD will identify names of 3-4 qualified/ willing visiting faculty members in the relevant discipline. After necessary scrutiny in consultation with Dean of the relevant faculty, HoD will forward CVs along with recommendations/ selection board proceedings to HR Dte at least 4 weeks prior to commencement of semester.
 - 2) HR Directorate will issue appointment letters after approval of Pro VC Academics at least 2 weeks prior to commencement of semester
 - 3) HoDs will ensure the following: -

- a) Timely dissemination of class schedule to the visiting faculty
 - b) Feedback from the students and other relevant faculty members for further engagement of visiting faculty during subsequent semester and forward recommendations to the HR Directorate
 - c) Any other coordination to facilitate visiting faculty
- 4) Director Academics (Clinical) will process remuneration bill based on attendance sheet received from the office of the relevant faculty during the last week of the semester.
- 5) Rates of the visiting faculty per credit hour are as under: -

Revised Rates - Visiting Faculty		
Ser #	Designation	Rate (PKR) per credit hour
a.	Assistant Professor	Rs 2500/-
b.	Lecturer	Rs 2000/-

- 6) In case of exceptional candidates/ circumstances the rates may be enhanced by 25% subject to approval of VC

5. Appointment of Adjunct Faculty Policy

An adjunct faculty is a person involved in teaching/research programs at National University of Medical Sciences (NUMS) but is not its employee. Services shall be on honorary basis except for some essential expenses approved by the competent authority on case to case basis.

Purpose

NUMS has emphasized the development of closer liaison with other universities, research organizations, industry and cultural institutions. All these organizations have highly qualified scientists and scholars who can contribute to the NUMS on honorary bases to further strengthen its teaching and research programs over an extended period of time.

Eligibility

- a. When a department of NUMS identifies a need for expertise in certain areas, it may nominate a candidate to be an adjunct faculty. Persons eligible for appointment on these positions should be qualified because of their teaching and/or research experience to make a contribution at an advanced level to the programs of the university.
- b. For appointment, an adjunct faculty nominee must hold or had held an academic/research position in an institution.

Terms of Appointment

- a. Initial appointment shall be for a period of two years but extendable with mutual consent.
- b. The appointment shall be honorary with title of the position according to the academic credentials of the person.
- c. The adjunct faculty shall not be entitled to the benefits as admissible to the regular

faculty members of the university.

- d. An adjunct appointment may be terminated by mutual consent or by either party on one month's notice.

Procedure for Appointment

HOD of the department shall nominate the person and send a request to the concerned Dean. The dean shall initiate the case and send it to VC NUMS through Pro VC Academics for final approval. If approved, the dean shall communicate the decision to the HR department for further necessary arrangements.

6. Hiring of Consultants/ Experts

(To be read in conjunction with the National University of Medical Sciences, Statutes, 2017).

- a. **Introduction.** Being a research intensive University, NUMS always endeavours to hire high qualified employees to improve its functioning and ranking. As the universities need expertise of experienced individuals, various measures are taken to have continuity with their specialized assignments so as to optimally benefit from their experience.
- b. As per Para 28, Chapter-VI NUMS Statutes 2017, the Vice Chancellor is competent authority in this behalf. The said Para is reproduced as "The Vice Chancellor may, in connection with any official activity of the University, hire technical or professional services of any consultant or expert for such purposes (other than audit of accounts), duration and conditions including charges as he may deem necessary and every such hiring will be done on competitive basis."
- c. **Title.** This policy may be called as the Policy on Hiring of Consultants/ experts. Enforcement. It shall come into force at once.
- d. **Procedure.** Following procedures shall be followed:
 - 1) The requirement for hiring of Consultants/ Experts will be identified by the concerned Pro-VC.
 - 2) Qualification, expertise and experience required for the position and the job description/ job assignment will be specified for any such hiring in consultation with the concerned authorities, such as Principal/ Dean or equivalent.
 - 3) Selection Board, comprising following, will conduct interviews and shortlist the candidates: -
 - a) Pro-VC (Acad)/ Pro-VC (Adm) - Chairman
 - b) Dean Concerned - Member
 - c) Director Coord - Member
 - d) Technical Experts/ Subject Specialist (as & when required) - Member
 - e) Addl Director HR - Member/Secy
 - 4) The Selection Board shall recommend the pay package, duration of hiring etc.

- 5) Hiring will be time / project / assignment specific, on temporary (contract) basis for a maximum period of one (01) year.
- 6) Decision of the Vice Chancellor shall be final.

7. Policy

a. Preamble

Leave is a privilege and cannot be claimed as a matter of right. A NUMS employee (Faculty & Management Staff) shall apply for leave stating the reasons, the period and location of the leave on prescribed Leave Form and process the application through reporting channel, for approval by the Sanctioning Authority.

b. Main Features

Due to certain gaps in the existing leave policy, the comprehensive Leave Policy for NUMS employees was proposed during an IHD chaired by VC NUMS on 16 Nov 2022, which was attended by Pro VC (Acad), Pro VC (Adm), Registrar and Addl Director HR, the said policy has been deliberated at length.

- c. On the recommendation/ approval of Competent Authority, the types of leave admissible to the employees of the university are as under: -

- 1) Short Leave
- 2) Casual Leave (CL)
- 3) Earned Leave (EL)
- 4) Maternity Leave
- 5) Paternity Leave
- 6) Medical Leave
- 7) Extraordinary Leave (EOL)
- 8) Study Leave
- 9) Ex-Pakistan Leave (EPL)
- 10) Special (Iddat) Leave
- 11) Academic Leave

a) Short Leave

- 1) An employee may be granted short leave in extreme emergency for maximum two (2) times in a month.
- 2) Maximum period of short leave shall not exceed four (04) hours in a day.
- 3) Late return/ attendance beyond 30 minutes on two occasions in a month may be excused, if convinced that it is due to unavoidable reasons. On third occasion, one-day leave deduction and letter of advice by Dir/ HoD with copy to HR Dte. In case no leave in balance, one-day leave without pay will be enforced.

b) Casual Leave (CL)

- 1) An employee may be given casual leave up to 16 days in a service year.
- 2) CL may be combined with any other type of leave.
- 3) CL shall be counted for working days only. However, intervening Saturdays, Sundays and other holidays shall be counted as casual leave. This rule will not

be applicable on holidays which are part of Edu-ul-Fitr, Eid-ul-Azha and Christmas (for Christians only).

- 4) CL will not be granted for more than 10 days at one time. However, under special circumstances, it may be granted more than 10 days, at the discretion of the Competent Authority.
- 5) Adhoc/ Temporary employees may also be given casual leave, proportionate to their contract period.

c) Earned Leave (EL)

- 1) EL will be allowed @2.5 days per month, thirty (30) days in a service year with full pay.
- 2) Duty period of 15 days or less in a calendar month will be ignored and that of more than 15 days will be treated as a full calendar month for the purpose of earning the leave.
- 3) If an employee proceeds on leave during a calendar month and returns from it during another calendar month after consuming the leave and the period of duty in either month is more than 15 days, the leave credited for both the incomplete months shall be restricted to that admissible for one full calendar month only.
- 4) EL will be carried forward within current Service Contract period only.
- 5) Advance EL (with pay) may be granted to NUMS Employees with atleast two years' service at NUMS, for a maximum period of thirty (30) days in a service year. It may be granted sparingly to employees having good conduct during stay at NUMS, subject to the satisfaction of the sanctioning authority.
- 6) Honorarium shall be admissible at the end of service at university, where an employee has accumulated EL (max 60 days) and rendered five years continuous service in the university with EL balance @ 15 days per service year along with minimum 200 "in campus working days" per annum. Such honorarium will be equal to "one last drawn gross pay" per 30 days of accumulated EL.

d) Maternity Leave

- 1) A female employee shall be entitled to Maternity Leave on full pay for a period not exceeding three months (90 days), provided that the date of her confinement falls within the period of the leave and the leave does not exceed six weeks beyond the date of confinement.
- 2) Such leave may not be granted for more than three (03) times in the entire service of a female employee.
- 3) For confinement beyond the third time, the female employee would have to take leave from her normal leave account from EL.
- 4) Maternity Leave may be granted in continuation or in combination with, any other kind of leave as admissible to a female employee

e) Paternity Leave

- 1) A male employee shall be entitled to Paternity Leave on full pay for a period not exceeding ten (10) days outside EL account, to take care of his spouse / new born or an infant.
- 2) Such leave may not be granted for more than three (03) times in the entire

service of a male employee.

f) **Medical Leave**

- 1) Medical Leave may be granted to an employee in case of illness on production of Medical Certificate from an authorized Medical Officer and duly countersigned by NUMS authorized officer/ Director Adm. Medical Leave applied for, on genuine medical grounds shall not be refused generally.
- 2) The leave sanctioning authority may, at its discretion, get a second medical opinion from authorized Medical Officer/ Medical Centre, as the case may be, to have the applicant medically examined.
- 3) Medical Leave shall be adjusted against the balance of EL as a general rule. However, hospital admission period may not be debited to EL account. Moreover, pay shall not be admissible where admission/ medical leave (either consecutively or with intervals) exceeds thirty (30) days in a service year.
- 4) Medical leave more than fifteen days shall be sanctioned by the Vice Chancellor.

g) **Extraordinary Leave (EOL)**

- 1) EOL shall be granted only when the Competent Authority is satisfied that such leave is in the larger interest of the University.
- 2) An employee who has been removed from probation may be granted EOL (without pay) at the discretion of the Competent Authority.
- 3) A leave sanctioned (without pay) for research/ postdoc in relevant discipline may be called as EOL. Such EOL cannot be granted beyond the end of service contract date, however, if an employee gets the honorary contract (before proceeding on leave) as a special case from the Competent Authority on the recommendations of Dean/ Dir RD, his EOL may be granted by the Sanctioning Authority till the end of his honorary contract.
- 4) EOL so granted shall not exceed five (05) years throughout the entire service of an employee and two (02) years at a stretch without any provision for extension. There will be a minimum gap of 3 years between EOL for research/ postdoc. In case of non-joining/ resumption of duties after completion of two (02) years of EOL, service of the individual will stand discontinued and end service benefits will not be admissible.
- 5) While proceeding on EOL (leave period equal to or more than a semester) the faculty will have to serve the balance of bond period (if required).
- 6) While on EOL no increments will be admissible to the employee.
- 7) EOL may be granted to faculty going on deputation/ attachment to higher administrative position (such as VC/ Pro VC) within country or abroad (without pay) where it can be of four (04) years at a stretch

h) **Study Leave**

- 1) Study Leave may be granted to an employee for obtaining higher qualification degree (PhD / MS in relevant disciplines) with pay as per EL balance and the rest without pay (EOL).
- 2) Study Leave may be granted to an employee who has been removed from probation, which is mandatory.
- 3) Study Leave may be granted to an employee up to maximum of five (05)

years throughout the entire service of faculty/ staff member.

- 4) Study Leave cannot be granted beyond the end of service contract date as a general rule. However, if an employee gets the honorary contract (before proceeding on leave) as a special case from the Competent Authority on the recommendations of Dean/ Dir RD, his study leave may be granted by the Sanctioning Authority till the end of his honorary contract.
- 5) Before proceeding on study leave, an employee shall execute legal/ codal formalities with RD Dte including a bond/ undertaking to serve NUMS after completion of studies, as per NUMS Resource Development (RD) policy.

i) Ex-Pakistan Leave (EPL)

- 1) EPL may be granted to an employee who intends proceeding abroad or takes leave while on duty abroad.
- 2) Ex-Pakistan leave shall start the day employee leaves the office and shall terminate on joining back NUMS, subject to a maximum of thirty (30) days at a time or part thereof as per available balance of EL. However, under special circumstances (Hajj etc.) EPL may be granted up to maximum forty-four (44) days, at the discretion of Competent Authority.

j) Special (Iddat) Leave

- 1) A female employee, on the death of her husband, may be granted Special Leave on full pay from the date of death of her husband, when applied for, not exceeding one hundred and thirty (130) days. This leave shall not be debited to her leave account.

k) Academic Leave

For faculty going on national/international seminars, taking exams, thesis defense may be counted as academic leaves.

- 1) Faculty can attend various academic activities (seminars/conferences/exams etc) after approval of Competent Authority, which is counted as temporary duty without involving any TA/DA from university.
- 2) Such duty may be limited to 15 days in a year

l) Leave Sanctioning Authority

- 1) The details of Leave Sanctioning Authority for NUMS Sectt Faculty/ Officers/ Staff
- 2) and AM College/ AFGMI (NUMS Faculty/ Staff) are attached.

NUMS Sectt Faculty/ Officers/ Staff

Nature of Leave	No of Days Per Year	Sanctioning Authority
Causal Leave (CL)	16 (Up to 10 days at a time)	1. <u>For Faculty/ Officers (NPS-12 & above):</u> Pro VC (on behalf of VC) 2. <u>For Faculty/ Officers (NPS 9-11 Plus):</u> Director/ HoD 3. <u>For staff (NPS-8 & below):</u> Addl/Dy Director
Earned Leave (EL)	30 (@2.5 days per	1. <u>For Faculty/ Officers (NPS-12 & above):</u> Pro

	month)	VC (on behalf of VC) 2. For Faculty/ Officers (NPS 9-11 Plus): Director/HoD (Over 15 days - Pro VC (Acad/ Adm)) 3. For staff (NPS-8 & below): Addl/Dy Director (Over 15 days - Director/ HoD)
Maternity Leave	90 days	Pro VC (Acad/ Adm) on behalf of VC through HR Directorate
Paternity Leave	10 days	Pro VC (Acad/ Adm) on behalf of VC
Medical Leave	As per Medical Advise	Up to 15 days - Pro VC (Acad/ Adm) through HR Directorate Over 15 days - Vice Chancellor through reporting channel and HR Directorate
Ex-Pak Leave (EPL)	As per requirement	For Faculty/ Officers/ Staff: Vice Chancellor for Faculty/ Officers (NPS-12 & above) through HR Dte on Minute Sheet Pro VC (Acad/ Adm) on behalf of VC through reporting channel for NPS-11 & below
Extra Ordinary Leave (EOL)/ Study Leave	As per requirement	For Faculty/ Officers/ Staff Vice Chancellor through reporting channel and HR Directorate
Special (Eidat) Leave	130 days	Pro VC (Acad/ Adm) on behalf of VC through reporting channel

AM College/ AFGMI (NUMS Faculty/ Staff)

Nature of Leave	No of Days Per Year	Sanctioning Authority
Causal Leave (CL)	16 (Up to 10 days at a time)	Respective Principal/ Commandant
Earned Leave (EL)	30 (@2.5 days per month)	
Maternity/ Paternity Leave	90 days/ 10 days	
Medical Leave	As per Medical Advise	
Extra Ordinary Leave (EOL)/ Study Leave/ Ex-Pak Leave (EPL)/ Leave without Pay	As per requirement	VC NUMS/ Pro VC (Acad/ Adm)

m) Leave Application Form

Leave Application form at **Annex-C**.

LEAVE APPLICATION FORM
NUMS EMPLOYEES

PART - I

C/Leave E/Leave Maternity/Paternity Med *Ex-Pak *Others

1. Name: _____ 2. *Designation/ Appt: _____
 3. Dte/ Dept: _____ 4. Type of Appt (Cont/ Temp): _____ 5. D.O.J: _____
 6. Duration of Leave: From _____ To _____ Days _____
 7. Leave already availed (during current year): _____ 8. Balance: C/L _____ E/L _____
 9. Leave Address / Contact details (Tel & Email etc): _____
 10. Purpose of Leave: _____ 11. Duties to be performed by: _____

Dated: _____

(Signature of Applicant)

PART - II

Registrar/ Director/ HoD/ Equivalent

Recommended/ Not Recommended/ Sanctioned

Dated: _____

(Signature)

PART - III

Comments by HR Dte

<u>Leave Details: -</u>		
Balance Verified on:-		
● Type of Appt: _____	● Days with Full Pay _____	_____ (Signature)
● C/L: _____	● Days without Pay _____	
● E/L: _____	● Other Info _____	

PART - IV

Pro VC (Acad/ Adm)

Recommended/ Not Recommended/ Sanctioned

Dated: _____

(Signature)

PART - V

Sanctioning Authority

Sanctioned

Not Sanctioned

Dated: _____

(Signature)

***Note:**

- Ex-Pak Leave (EPL)/ Extra Ordinary Leave (EOL)/ Study Leave will be processed by concerned Directorate/ Department through HR Dte on Minute Sheet.

➔ To: HR Dte

8. NUMS Probation Policy

a. Purpose

The probation policy provides information to the newly hired employees about the probation period. The probation period is a duration in which the performance and behavior of the newly hired employees is monitored and assessed by his/ her Manager and/ or Head of the Department, in order to check their potential as well as their suitability to the job.

b. Scope

The policy is relevant to newly hired employees and all the Directorates/ Departments of National University of Medical Sciences (NUMS).

c. Policy

The Vice Chancellor may: order to keep any employee or class of employees on probation for a specified period before his or their suitability is decided for confirmation into contract appointment(s);

d. Procedure and Responsibilities

In order to ensure uniformity in the treatment of probation period of NUMS employees, the following policy guidelines are issued after approval from the competent authority:

- 1) Every employee appointed to a post by initial appointment on contract (full time) basis shall be placed and treated to be on probation for a period of three (03) months commencing from joining for the post.
- 2) If deemed necessary, probation period may be extended on one-time basis for further period not exceeding three (03) months under approval from the Vice Chancellor. No further extension in probation period shall be admissible in any case.
- 3) All matters and issues regarding probation removal or its extension, shall be decided by the Vice Chancellor whose verdict in this regard shall be final.
- 4) Decisions about probation shall be taken in the light of the performance evaluation and recommendations to be furnished by the head of the Directorate or Department on Probation Evaluation Form about the concerned employee one week before the expiry of three months' probation period. However, in case of extended probation period, the recommendations for the removal from probation shall be furnished two weeks before the completion of the extended probation period, i.e., 06 months.
- 5) Timely submission of the probation extension or removal case of the employee shall be the responsibility of the concerned Directorate/ Department where the employee has been working during the probation period. HR Directorate will send two weeks' advance notice to the concerned Directorate / Department to ensure timely submission of such cases.
- 6) In no case, the probation period shall be considered to have been extended or probation removed automatically unless a probation extension or probation removal "Office Order" is issued by HR Directorate. However, in case of extended probation

period, delay in the issuance of probation removal “Office Order” up to fifteen days beyond the expiry of the extended period can be condoned under exceptional circumstances.

- 7) Extension or removal of the probation period may be either with or without any conditions.

9. Salary and Pay Package

- a. There will be fifteen pay scales of the University from one to fourteen including one extra numbered as 11-Plus thereby making the total as fifteen. The minimum and maximum limits of the salary (all inclusive) against each pay scale are specified in the Schedule of the statutes attached as “**Annexure-I**”.
- b. The pay package of an employee shall be approved by the Vice Chancellor as recommended by the concerned selection committee within the minimum and maximum limits of salary of the relevant pay scale keeping in view the qualification, relevant experience, merit and capability of the candidate ascertained and assessed at the time of his selection.
- c. As and if approved by the Vice Chancellor, the University shall pay from its own sources, the difference of salary to all such borrowed employees who are getting salary from their parent departments, institutions or formations that is lower than the salary being paid or otherwise considered or deemed to be payable to most of the equivalent designations or ranks of the University’s employees provided that the payable differential amount shall be determined on case to case basis.
- d. The special allowances admissible under the government policy or any other regulatory authority’s policy with reference to any specific post or qualification shall continue to be so admissible and paid by the University in addition to the salary payable by the University.
- e. The Vice Chancellor may employ any person on payment of special (lump sum) monthly pay package not exceeding rupees eight hundred thousand in any case keeping in view the qualification, experience and level or depth of professional excellence provided that the Pro-Chancellor may under circumstances of special or deserving nature relax the said capping in any case or class of cases.
- f. The Vice Chancellor may grant honoraria or reward to the employees of the University to the extent not exceeding the aggregate amount of three months’ salary of the concerned employee in a year provided that honorarium shall not be admissible where reward has been given to any employee in a year. The Pro-Chancellor may in his discretion grant honorarium or reward to the Vice Chancellor as deemed proper.
- g. No pension shall be admissible to any contract employee of the University.

10. Grant of Increment to NUMS Employees

- a. Introduction NUMS always endeavors to hire high caliber and appropriately qualified employees to improve its functioning and standing. As the Universities need experienced, efficient and productive work force, various measures are taken to

motivate and retain intellectual HR Capital, in today's competitive environment.

- b. As per Para 3 (5) of NUMS Act 2015, "The University shall have academic, financial and administrative autonomy". As per Para 7 & Schedule (sub-section (1) of section 7) of NUMS Statutes 2017, Pay Scales were approved during 1st BOG in Oct 2017 with minimum-increment-maximum limit of pay and the Vice Chancellor NUMS is Competent Authority in this regard. As per 'Fundamental Rules and Supplementary Rules' (FR & SR) Rule No. 24, of Federal Government reproduced as "An increment shall ordinarily be drawn as a matter of course/ routine unless it is withheld by Competent Authority"
- c. Title This policy may be called as the "Policy for Grant of Increments" to Employees on NUMS Pay Scale (less TTS, NIASR and Adhoc/Consultant).
- d. Enforcement It shall come into force w.e.f. 1 Oct 2021.
- e. Procedure Following procedures shall be followed: -

- 1) Gen NUMS Employees may be awarded increments taking into account the Performance Evaluation Report (PER), in-campus working days, reputation, conduct and service requirements.

2) Annual Increments (AI)

- a) Two annual increments may be awarded to all NUMS employees at the time of renewal of service contract for two years on the recommendations of Contract Renewal Board (CRB). However, award of one Annual Increment may be considered for those NUMS employees, whose contract period is extended for one year.
- b) Increments will not be admissible during Extraordinary Leave (EOL) or any other leave without pay more than six months in a service year.
- c) Increments may not be awarded to those employees whose increment is withheld by CRB/ Competent Authority on disciplinary grounds.

3) Performance Based Increments (PBI)

Two Performance Based Increments may be awarded to NUMS employees at the time of renewal of service contract for two years on the recommendation of Contract Renewal Board (CRB) taking into account following tangible parameters: -

- a) Overall "Outstanding" (95-100%) grading by HOD in Performance Evaluation Report (PER) duly shall not exceed more vetted by NSRO. However, outstanding grading ration shall not exceed more than 1 out of 5 for smaller Dtes / Depts having strength up to 6 and 1 out of 10 for remaining Dtes/ Depts.
- b) Qualifying service for Performance Based Increments is 200 "In Campus working days" per Service year.
- c) Service Contract extended for another two years.
- d) No negative observation/ disciplinary proceedings during current contract period.
- e) Decision of Contract Renewal Board (CRB) and the Vice Chancellor shall be final.

11. Contract/ Service Renewal Board Policy

a. Purpose

This document is to streamline the process and ensure transparency in Renewal of Contract of NUMS Employees.

b. Scope

This document is relevant and applicable to all the employees of National University of Medical Sciences (NUMS).

c. Policy

- 1) All appointments (recruitments) in the University shall be made by the Vice Chancellor only on contract basis for such duration extendable for such further terms as he may consider appropriate.
- 2) Except for the posts whose appointment tenure whether extendable or not is specified in the NUMS Act, 2015, the period for contract employment against other posts shall be decided by the Vice Chancellor, which may be up to two years extendable.

d. Procedure and Responsibilities

- 1) In order to streamline the process and ensure transparency in Renewal of Contract of NUMS Employee, following guidelines/procedure will be followed.
 - a) All employees, seeking renewal of contract, will apply to the competent authority through HR directorate, requesting for renewal of contract alongwith major contribution covering the current contract period, at least two months prior to the date of expiry of the existing contract, in sealed envelope. In case of non-receipt of consent letter two months in advance, the university may advertise the post.
 - b) Concerned Director/HoD to directly submit evaluation report of the employee covering the contractual period, to HR Dte at least two months prior to the date of expiry of the existing contract, in sealed envelope.
 - c) Schedule Contract Renewal Board (CRB) to consider the renewal of contract or otherwise taking into account the overall performance report reputation & service requirements and make suitable recommendation to the Competent Authority. Composition of the CRB is appended below:
 - Pro VC (Acad) / Pro VC (Adm) - Chairman
 - Dean Concerned Member
 - Registrar Member
 - Director Coord Member
 - Addl Director HR Member/Secretary
 - Any other NUMS employee may be co-opted by Chairman CRB, on as required

basis

- d) Complete and forward CRB processing alongwith requisite service information to Vice Chancellor for approval atleast 6 weeks before the expiry of the employee's contract, under confidential letter.
- 2) In the light of CRB's recommendations, VC office will communicate final decision to HR Dte well before time.
- 3) HR Directorate will formally inform the employee about the final decision of the Competent Authority, 5 weeks before the expiry of contract through Office Order, simultaneously informing Registrar office and department concerned.

e. Special Clause.

- 1) In case, the employee during the contract period has worked for more than 6 months in different Dtes/Depts, HR will seek Evaluation Report from previous HoD/Directors within two weeks of employee's transfer.
- 2) In case the employee has worked less than 3 months under any HoD/Director within that period, the Reporting Office will initiate the report in consultation with previous HoD/Director.

12. Service Review Policy

a. Purpose

This document is to review the performance of an employee of NUMS. It may be initiated by Dean/Director/HoD due to adverse report regarding the employee's performance.

b. Scope

This document is relevant and applicable to all the employees of National University of Medical Sciences (NUMS).

c. Policy

For premature review of service contract of NUMS employees, due to poor performance/adverse report, Service review board (SRB) will review the performance during the incumbency of employee's contractual period on the request of concerned Dean/Director/HoD.

d. Procedure and Responsibilities

In order to streamline the process and ensure transparency in service review of NUMS Employees, following guidelines/procedure will be followed: -

- 1) Receiving of written request from the concerned Dean/Director/HoD to review the performance of an employee through proper channel along with the following supporting documents in sealed envelope: -
 - a) Covering letter specifying the reasons, justification and recommendations.
 - b) Copies of counselling/advisory/warning letters etc.
 - c) Punctuality record

- d) Student feedback (in case of teaching faculty)
- 2) Upon satisfying all procedural documentation, the HR Directorate will prepare comprehensive case file of employee being considered for SRB, including details of Service particulars, Personal Information, Evaluation Report, Leave Record, Adverse Remarks, Disciplinary Actions.
- 3) Schedule SRB to consider the continuation of the service contract or otherwise taking into account the information/evidence provided by the concerned Dean/Director/HoD, reputation and service requirements. The composition of the SRB is appended below: -
 - a) Pro VC (Acad/Pro VC (Adm) Chairman
 - b) Dean Concerned Member
 - c) Registrar Member
 - d) Director Coord Member
 - e) Addl Dir HR Member
 - f) Any other NUMS employee may be co-opted by Chairman CRB, on as required basis

If any member of the SRB is directly or indirectly related with the decision, he/she may be exempted from attending the proceedings, being conflict of interest.

- 4) Complete and forward the SRB proceedings in complete form along with requisite service information for Vice Chancellor's approval under confidential letter.
- 5) In the light of SRB recommendations, VC office will communicate final decision to the HR Dte.
- 6) HR Dte will formally inform the employee, Registrar office and concerned department about the final decision of the Competent Authority regarding continuation of Service Contract or otherwise.

13. Maximum Age Limit of Service Policy

- a. **Introduction.** Being a research intensive University, NUMS always endeavors to hire high-caliber faculty and staff to maintain and improve its functioning and standing. However, the condition of superannuation (60 Years) restricts the University to optimally benefit from the specialization and experience of skilled employees (Faculty & Management Staff) already serving at NUMS and hiring of fresh HR Capital in specialized fields.
- b. All the Autonomous, Semi-Autonomous bodies and Universities, established under the Federal Government Act, have their own policy for Employee's Maximum Age for Service on Contractual basis. As per NUMS Act 2015 para 3 (5) "The University (National University of Medical Sciences) shall have academic, financial and administrative autonomy, including the powers to employ officers, teachers and other employees". As per Para 6 (c) of NUMS Statutes - 2017 "All appointments (Recruitment) in the university

shall be made by the Vice Chancellor only on contract basis for such duration extendable for such further terms as he may consider appropriate”. As per Para 6 (b) of NUMS Administration Regulations-2017, “This period for contract employment may be up to two years extendable” except Statutory Positions. However, NUMS Statues 2017 and Administration Regulations-2017 are silent, as far as maximum age of Employees (Faculty & Management Staff) for service at NUMS is concerned.

- c. **Title:** This policy may be called as the “Policy for Maximum Age Limit of Service of NUMS Employees (Faculty & Management Staff)”.
- d. **Enforcement:** It shall come into force with immediate effect.
- e. **Main Features:** Due to nonspecific age limit in NUMS Statues-2017, the following Age limits of service for different Categories of NUMS employees (Faculty & Management Staff) have been spelled out: -

1) Statutory Positions Appointment

- a) As per NUMS Act - 2015, Para 12 “Pro Vice Chancellors shall be appointed through BoG on the recommendations of Vice Chancellor”.
- b) Statutory positions (Registrar, Treasurer and Controller of Examination) shall be appointed through BoG on the recommendation of Vice Chancellor for term of renewable period of 3 years on contract basis.
- c) Max age limit at the time of induction for these Statutory Positions (NPS-12) shall not exceed 57 years.
- d) In case of exceptional candidates with extraordinary credentials, age limits may be relaxed by the Vice Chancellor up to 2 year (Max) subject to final approval by BoG.
- e) Initial appointment of 3 years on contract basis may be renewed for maximum tenure of another 3 years through BoG.

2) Fresh Induction of Senior Positions (Contract)

- a) Max Age Limit at the time of induction for following senior positions on contract basis, shall not exceed as per details below: -
 - NPS 13 & Beyond - 60 Years
 - NPS 12/11+ - 57 Years
- b) In case of exceptional candidates with extraordinary credentials, age limit may be relaxed by the Vice Chancellor as under: -
 - NPS 13 & Beyond - up to 3 Years
 - NPS 12/11+ - up to 2 Years

3) Fresh Induction (Consultant/Expert):

- a) Senior Professionals having exceptional skills with the age beyond 60 years may be engaged as Consultant/Experts (NPS-13/12) for a maximum period of one year to serve up to 70 Years (Max)

- b) In case of exceptional candidates with extraordinary credentials, age limit for (NPS - 13/ 12) may be relaxed by the Vice Chancellor up to 3 year (Max)
- c) Consultant/ Expert shall not exceed 25% strength of employees in their respective Pay scale & Category.

f. Service age of Employees at NUMS

1) Faculty (65 Years Max)

- a) Basing on Unique Qual/Performance/Experience, service of 10% faculty may be extended beyond 65 years through Contract Renewal Board (CRB) on yearly basis up to maximum 70 years, subject to their mental & physical fitness.
- b) TTS Faculty shall be governed as per TTS rules. However, after retiring from TTS (at 60 years) the exceptional faculty may be engaged on NPS through selection board in best interest of university.

2) Management Staff (65 Years Max)

- a) Senior Employees (NPS-11+ and above) having exceptional skills attaining the age of 65 years while serving at NUMS, may be engaged as Consultant/ Experts.
- b) Service of NUMS Employees (NPS1-10) shall not be extended beyond 60 years.

3) Consultant/ Expert (70 Year Max)

- a) Shall not exceed 25% strength of employees in their respective Pay Scale & category.
- b) Appointment will be Time/ Project/ Assignment specific

g. Procedure for hiring of Consultant/ Expert: - The following procedure shall be followed: -

- 1) In the best interest of the University, Senior Professionals (NPS-12/11+ & above) having unique qualification, exceptional skills in specific/rare disciplines and prolonged experience of serving in universities/ reputed organizations may be engaged by the Vice Chancellor as consultant/ experts beyond the age of 65 years.
- 2) The requirement for hiring of Consultant/ Expert will be identified/ vetted by the concerned Pro- VC.
- 3) Qualification, expertise and experience required for the position and the job description/ job assignment will be specified for any such hiring in consultation with the concerned authorities, such as Principal/ Dean or equivalent.
- 4) The case for selection of Consultant or Experts (NPS-13/12) on competitive basis will be presented before a Selection Board, comprising following for shortlisting and interviews: -
 - a) Pro-VC (Acad) - Chairman
 - b) Pro-VC (Adm) - Co-Chairman
 - c) Dean Concerned/ Equivalent - Member
 - d) Director Coord - Member
 - e) Technical Experts/ Subject Specialist - Co-opted Member (as & when required)

- f) Dir/ Addl Dir HR - Member/ Secy
- h. The selection board shall recommend the lump sum pay package (increment not applicable) and duration of hiring etc.
- i. Hiring will be Time/Project/ Assessment specific, on the temporary (contract) basis for a maximum period of one year
- j. Decision of the Vice Chancellor shall be final.

14. **Best Teacher Award Policy**

<https://lumhs.edu.pk/hec/docs/Revised-Framework-Award-Procedure-BUTA.pdf>

15. **Faculty Workload Policy**

This policy establishes guidelines for the assignment of workload for full-time faculty in NUMS

a. **Scope and Definitions**

- 1) This policy covers full-time faculty in NUMS. The annual period of the workload assignment for each full-time faculty member is commensurate with the annual period of the faculty member's appointment, typically either for 9- or 12-month period
- 2) The workload of teaching faculty member is the fulfillment of his or her responsibilities in the areas of teaching, scholarly activity and administrative service to the department and the University
- 3) Faculty workload has been divided across three areas: **teaching-related activities, research, and administrative work** depending on the type of appointment. However, Heads of Department/Dean are ultimately responsible for ensuring a fair distribution of work within Departments/ Faculty
- 4) Different areas of work and responsibilities but not limited to, are as follows:
 - a) **Teaching -related activities.** It includes teaching a full course during a semester (lecture preparation, teaching of credit courses, theory and practical, student supervision, program coordination, curriculum development and revision, paper setting, fair and prompt grading of student work, submission of midterm and final grades ahead of deadline, informed advisement for student class progression and mentoring students) both undergraduate or graduate, supervision of projects, thesis, internship and community work. It also includes online tutoring, assessment and evaluation commitment and facilitation of workshops
 - b) **Research.** It includes scholarly activities comprising of supervision of research work of students, submission of research proposals and manuscripts, conduct of research project, reviewer of paper in a journal, member of editorial board of reputed journals and participation in conferences and publications. This also provides the basis for a standard scholarship workload for faculty whose position is defined to have such an expectation

c) **Administrative work.** It includes the administrative activities including responsibilities of dean and head of department, section head, semester coordinator/academic advisors, participation in different committees, representation at different forums, program coordinator and mentoring junior faculty within one’s discipline, university/ departmental technical committee. It also includes Convener of Societies, workshop, course, conference and seminar, and continuous professional development

d) **Faculty work load Teaching-related activities.**

- (1) Heads of Department/Dean shall be overall responsible for ensuring a fair distribution of work within Departments/ Faculty. However, for research, he/ she shall be responsible for assessing each faculty member against the department’s research, scholarship, or creative activity workload guidelines
- (2) Dean/ HOD may assign more hours to any area to any faculty member as per need of the department
- (3) Faculty workload will consist of minimum of 9 credits per semester
- (4) Allocation shall be according to specific needs/scope of responsibility of the specialty and cadre.
- (5) Teaching centric appointments will follow maximum work load for teaching and minimum for research and administrative work
- (6) Research centric appointments will follow maximum work load for research and minimum for teaching and administrative work
- (7) Heads of Department shall be responsible for accurate calculation of faculty workload shall be accurately and to fill in the ‘Program Review Reports’ on HoD Portal- QA portion of website.
- (8) Following are the recommended credits allocated to different tasks/ duties:

S#	Tasks	Credits Assigned
TEACHING		
1.	Teaching a full course during a semester. Credits will be assigned according to the credit hrs of the course.	4/3/2
2.	Online tutoring (for HPE)	1/semester
3.	QA in assessment and evaluation / week commitment	0.5
4.	Facilitator of workshops/ for three full day’s workshops (includes face to face)	2
5.	Supervised internship & community work	0.5/semester
RESEARCH		
1.	PhD supervisorship	2 per student (Max 4)

2.	PhD Co-supervisorship/student	1 per student (Max 4)
3.	MS/MPhil Supervisorship (max 2 students) (HPE Max 4)	1 per student
4.	MS Co-Supervisorship/student (HPE Max 4)	0.5 per student (Max 1) Max 2 (HPE)
5.	BS supervisorship (research project or industrial internship) students	0.5 per student
6.	Research project as PI	<u>A- For Natural Sciences</u> 3 (grant above Rs.2 million) 2 (grant below Rs.2 million) <u>B- For Social Sciences</u> 3 (grant above Rs.1 million) 2 (grant below Rs.1 million)
7.	Research project as Co-PI	<u>A- For Natural Sciences</u> 1 (grant above Rs.2 million) 0.5 (grant below Rs.2 million) <u>B- For Social Sciences</u> 1 (grant above Rs.1 million) 0.5 (grant below Rs.1 million)_
8.	Research work a. Proposal submission as PI b. Proposal submission as Co-PI c. Need analysis for projects	2 per proposal (Max 4) 1 per proposal submitted/year (Max 2) 0.5 per proposal submitted/year (Max 2) 0.5/year
9.	Reviewer of paper in a journal/Member of editorial board of reputed journals	0.25/review/year (Max 2)
ADMINISTRATION		
1.	Deanery	4.5
2.	HoD	3.5
3.	Section Head	2
4.	Semester Coordinator/academic advisors (UG)	1

5.	Notified university technical committee/Convener of Societies (max 2)	1
6.	Notified departmental technical committee/convener of Societies (max 2)	0.5
7.	Convener of workshop/course (having minimum of 15 external participants) OR Convener of conference/seminar (having minimum of 30 external participants)	1 (Max 2)
8.	Convener of workshops/courses for NUMS faculty	0.5/semester (Max 1 per year)
9.	Continuous professional development as per NUMS policy	1
10.	Any additional duties assigned	TBD on case-to-case basis

16. Faculty Performance Evaluation

NUMS faculty and staff performance evaluation performa and details are attached as “Annexure-J”.

17. NUMS Policy on Conflict of Interest

a. Introduction

The success of National University of Medical Sciences depends on a talented and creative faculty, staff and students who earn national and international recognition for their contributions to teaching, research and advancement of their diverse professional specialties. Faculty and staff get opportunities to engage in professional activities with commercial entities, scientific organizations and governmental agencies as well as other universities. Such activities can help faculty and staff develop their knowledge and skills; contribute to the growth and development of their area of expertise and enhance the academic and research objectives of the departments and university. Participation in these activities may however pose actual and/or potential conflict of interest. Nevertheless, NUMS must continue to make it possible for faculty and Staff to advance their teaching, service, and research through various collaborations in a manner that avoids actual or potential Conflict of Interest.

b. Definition

Conflict of interest means the unlawful financial benefit or a liability accruing to the NUMS employee or student or his/her family including his/her spouse, dependent children and dependent parents due to his/her official position.

c. Types of Conflicts

A conflict of Interest can be:

- 1) **Actual;** Where a conflict actually exists
- 2) **Apparent;** When a conflict is only perceived to exist, or
- 3) **Potential;** When a conflict of interest is a future possibility.

d. Disclosure of Conflict of Interest

The responsibility for identifying and avoiding conflict of interest or any other circumstances that might reasonably give rise to the perception of conflict of interest, in the first instance, lies with the individual employee or student. Upon reasonable suspicion, the employee should immediately inform his next superior in hierarchy both verbally and in writing, encompassing all available details of the case. On receipt of information, the superior, should process the case to the competent authority.

Disclosure must include sufficient information to enable appropriate resolution, which can include: type of conflict of interest, nature of the activity, a description of all parties involved, potential financial or non-financial benefits, and any other relevant information. The confidentiality of disclosures shall be respected and the information shall only be shared with those who need to know, Failure to disclose an actual or perceived conflict of interest, or to continue involvement in the situation until the conflict has been resolved, constitutes a breach of the employee's contract of employment and may result in disciplinary action, and in serious cases could result in dismissal. In determining whether disciplinary action is appropriate, consideration shall be given to the extent to which the employee could reasonably have been aware of the actual or perceived conflict of interest and/or made a reasonable decision not to declare it.

The university reserves the right to seek any/all needed information from an employee or a student, as and when required, for the purpose of clarification or resolution of the conflict of Interest.

e. Responsibilities

The responsibilities of the NUMS Directors, Heads of Departments, Researchers and the Conflict of Interest Committee are described below:

1) Responsibilities of the Directors and HODs

The Directors and HODs are responsible to ensure that employees and students within their directorates/departments are made aware of this policy. They shall refer the disclosures of actual, perceived or potential conflicts to the Conflict of Interest Committee.

2) Responsibilities of the Researchers

Since the NUMS researchers may need to interact with different stakeholders during their research activities, it is necessary for them to make themselves aware of the Conflict of Interest Policy and comply with the same in letter and spirit. They are also responsible to be aware of and to comply with conflict of interest requirements

set by external funding agencies or other organizations/universities with whom agreements are being or have been made. They shall make disclosures of actual or potential conflict of interest to their respective Heads of the Departments.

3) Responsibility of the Director HR

Director HR shall keep the record of disclosures made by the employees and students of NUMS. Hierarchy at each tier should regularly educate their under command about sensitivity of avoiding conflict of interest.

f. Procedure for Disclosing Conflict of Interest

As a general procedure, the disclosure shall be made to the Head of Directorate/Department (or equivalent) at the time a conflict first arises or when arising of a conflict is perceived.

If the disclosure involves the person of a Director/HOD or above, it will be made to the respective Pro Vice Chancellor, as applicable, who will forward the case to Conflict of Interest Committee. Disclosures related to the Pro Vice Chancellors and the officers directly reporting to the Vice Chancellor (if any) will be made to the Vice Chancellor.

The information disclosed by any employee or student will be kept confidential as far as possible and will be used only to facilitate the processing of the case, as deemed necessary.

g. Conflict of Interest Committee (COIC)

The COIC shall be appointed by the Vice Chancellor, as and when required. The Committee shall be charged with the implementation of this policy.

h. Sanctions

In case of noncompliance with this policy, the COIC may recommend following, but not limited to, sanctions:

- 1) Appropriate admonition
- 2) Inclusion of a letter of advice/warning from the Director/HoD (or equivalent) or a higher position holder, as applicable, in the individual's personal file
- 3) Non-renewal of the employee's appointment contract
- 4) Dismissal of the employee from the NUMS' service
- 5) Termination of a student from his/her program
- 6) Any other restriction, limitation and punishment determined by the Committee as justified by circumstances.

CHAPTER VII

ADMINISTRATION POLICIES

1. Office Timings

- a. Following timings are notified for strict compliance by all university employees: -
 - 1) Office Timings : 0800 - 1600 hrs
 - 2) Tea, Lunch/ Prayers Timings : 1315 - 1400 hrs
- b. All Head of Directorates / Departments are requested to instruct / guide the staff to ensure following: -
 - 1) Observe the office timings strictly.
 - 2) Biometric attendance is endorsed by all staff in the morning and afternoon.
 - 3) Short leave is entered in the department leave register and Adm Dte is apprised accordingly.
- c. Attendance report will be put up to the Pro-VC (Adm) on weekly basis.

2. Dress Code

a. Purpose

Administration Directorate dress code SOP outlines how Head of Directorate expects staff to dress up at work. Staff should note that their appearance matters when representing any directorate in front of visitors or other parties. Staff appearance can create a positive or negative impression that reflects directorate's working environment and its culture. Therefore, it is desired that all officers / officials / staff should wear respectable and decent dress respectively.

b. Scope

This policy applies to all employees of National University of Medical Sciences (NUMS).

c. Responsibility

Director of Administration directorate will nominate Manager / Supervisor to implement the dress code policy and take necessary actions as per policy disciplinary action section.

d. Policy Elements

These dress code rules will apply:

- 1) Assistant Manager & above will wear neck tie.
- 2) Waist Coat is must with Shalwar - Qameez.
- 3) Jeans, T-Shirts and Chappal / Sandal are not permitted.

e. Disciplinary Consequences

When an employee disregards dress code, concerned nominated Manager / Supervisor should report to Dy Dir Adm. If, after counseling the same things are repeated, the observation will be forwarded in writing to concerned Director with information to Registrar.

3. Travelling Policy

Purpose:

The policy shall cover medical expenses, cancellations, delay, personal effects, etc. while engaged in foreign travel for a business purpose.

Scope:

This policy shall be applied on all staff member.

Policy Guidelines:

a. Official Travel

- 1) An employee intending to travel on official assignment shall inform the Admin Department after prior approval from concerned authorities of the intended visit, the destination, travelling itinerary, purpose and duration.
- 2) Employee shall bound to give temporary move sanction performa signed by head of department with approved minute sheet at least 5 working days prior to visit.
- 3) Air Tickets for out of country or inside country shall be purchased from approved vendors of NUMS.
- 4) Reservation of air ticket shall be subject to the availability of flights and ticket.
- 5) Upon receipt of the approved memo, Administrative Officer shall make reservations with the appropriate carriers, hotel and car agencies. This process shall be greatly facilitated by using an appointed travel agency.
- 6) It should be noted that:
 - a) Tickets shall be provided one day prior to the date of departure unless otherwise requested for.
 - b) Unauthorized routings and stopovers shall be at the traveler's personal expense.

b. Travel Policy

- 1) Employees of NUMS shall be traveled on the basis of the most direct route.
- 2) All employees shall be encouraged to travel using the economy class. Business class shall be subject to the approval of competent authority.

c. Travel Industry Promotions

- 1) Employees shall not accept, directly or indirectly, for themselves or on behalf of any person or company with whom they are in close social, family or economic relationship, any gift, hospitality.
- 2) Employees shall not accept benefit from any person, group or company having dealings with NUMS where such gift, hospitality or other benefit could possibly influence employees in the exercise of their duties and responsibilities.
- 3) All such offers shall be reported to the NUMS Administration Directorate and /or the Director Admin who will determine whether they can be accepted or not.

d. Cancellation or Amendment of Travel

The traveler shall inform the Admin Department within a reasonable time frame of intended cancellations of flight and hotel reservations when changes occur during the course of travel so that these issues execute.

e. TA/DA Policy:

- 1) Specified stations for special rates as notified from time to time are Hyderabad, Karachi, Sukkur, Bahawalpur, DG Khan, Multan, Quetta, Sargodha, Sialkot, Lahore, Gujranwala, Rawalpindi, Islamabad, Faisalabad, Peshawar, Northern Areas, Muzaffarabad, & Mirpur AJ&K.
- 2) Daily allowance shall be admissible only for the actual night(s) at the out: station for which daily allowance shall be claimed. Where night stop is not involved and if absence from Headquarters exceeds four hours, half daily allowance shall be allowed.
- 3) The proposed rates shall not apply where 20 fixed DAs for operational duties are being paid with salary which will be admissible on existing rates.
- 4) NUMS shall pay reasonable travel and living expenses of employees on temporary duty according to the rates maintained by the NUMS Finance Directorate.
- 5) For NUMS employees using the meals/incidentals rates, all other expenses including hotel charges are to be accounted for on an actual and reasonable basis as per category rate define by Finance Directorate.
- 6) NUMS employees shall be reimbursed the costs incurred for necessary communications on NUMS business. Such expenses shall be supported by details as to the purpose of the call.
- 7) NUMS shall bear any costs incurred in complying with immunization requirements for NUMS staff members and project advisors required to travel on NUMS business.
- 8) The Vice Chancellor NUMS shall be competent authority to authorize and sanction temporary duty in all cases.

f. Completion of Expense Reports

- 1) On completion of official duty travel, an employee shall submit an expense statement to the Finance Directorate with supporting receipts within ten (10) working days.
- 2) After verification by the Admin Directorate, the expense statement shall be forwarded to Finance Directorate for entry into the accounts and for settlement of any reimbursements.
- 3) Finance Directorate shall not reimburse amount without verification from Administration Directorate.
- 4) Administration Directorate shall verify that officer on temporary duty did not take any facility to avoid any duplication.

g. Medical Emergencies

- 1) NUMS shall assist staff members with deferring some of the costs associated with medical emergencies incurred in the course of NUMS temporary duty travel

where such costs are not covered by the staff member's medical scheme.

- 2) This shall be at the discretion of the Vice Chancellor NUMS.
- 3) When a NUMS traveler combines personal travel with business travel, NUMS shall assume no responsibility for the costs associated with medical emergencies which occur during the personal portion of the trip or involving accompanying dependents who are not traveling on NUMS business.

h. NUMS OFFERS/ FACULTY MEMBERS/ STAFF ON OFFICIAL DUTY

- 1) NUMS officers, faculty members and staff move to outstations for inspection and visit of affiliated medical institutions and other universities/institutions. There is a need to lay down SOP for sanction of move/payment of TA/DA to officers and staff.
- 2) **Move Sanction.**
 - a) The move of inspection teams will be carried out after approval of Vice Chancellor.
 - b) Registrar office will initiate case for accord of move sanction for serving officers from GHQ Med Dte, DMS-1 (IS) with information to offer's unit.
 - c) Registrar office will also obtain approval of move sanction in respect of non-uniformed officers/faculty members from Vice Chancellor.
 - d) Registrar/Dy Registrar will accord move sanction to non-gazetted staff.
- 3) **Coordination/Execution of Move.** Dy Director Adm will perform following functions regarding move of officers/staff: -
 - a) Obtain APW in respect of serving officers from respective institute/college/hospitals after move sanction from competent authority is received.
 - b) Inform the schedule of move to respective institution to be visited, for accommodation/reception.
 - c) Arrange transport for pick & drop, to and from airport/railway station/bus terminal.
- 4) On completion of duty, TA/DA claim proforma will be prepared as under: -
 - a) **Serving Officers.** Respective institute/college/hospital will process TA/DA claim as per service rules.
 - b) **Non-Uniform Officers& Non-Gazetted Staff.** Account Office NUMS will prepare TA/DA claim for approval of VC.
- 5) **Documents.** Following documents will be required to claim the TA/DA: -
 - a) Move Sanction by competent authority.
 - b) Original tickets/bill, for the approved mode of travelling.
 - c) If travelled by own car, photocopy of the Registration Book of the car.
 - d) In case of stay, Room Rent/messing charges will be billed based on a certificate by the claimant that he has not availed himself of the free transport/accommodation/ messing facility.

- 6) **TA/DA Rates.** The payment of TA/DA in respect of retd officers/civilian staff will be made as per following rates as authorized in para 2.7 and 3.8 to Part - I of “Manual on Travelling Allowance Rules Pakistan Public Administration Research Centre Establishment Division Cabinet Secretariat Islamabad 2013”.

a) **Daily Allowance**

Scale	Ordinary Rates (In Rs)	Special Rates (In Rs)
BPS 1-4	310	500
BPS 5-11	390	550
BPS 12-16	700	900
BPS 17-18	1250	1600
BPS 19-20	1550	2050
BPS 21	1750	2500
BPS 22	1750	3000

b) **Transportation / Mileage Allowance**

<u>Transportation</u>		
i) Motor Car		Rs. 5/- per km
ii) Motor Cycle/Scooter		Rs. 2.5/- km
<u>Mileage Allowance</u>		
i) Personal Car/Taxi		Rs. 10/- per km
ii) Motor Cycle/Scooter		Rs. 4/- per km
iii) Bicycle/Animal back/foot		Rs. 2/- per km
iv) Public Transport		Rs. 2.5/- per km

4. **Use of Vehicles**

- a. Vehicles held at NUMS Secretariat will be used for administrative duties, elaborated in succeeding paragraphs.
- b. Director Administration (Dir Adm) / Deputy Director Administration (Dy Dir Adm) will detail transport for administrative duties only on required basis as under: -
- 1) Conveyance of local and out station examiners/ Delegates/ guests from Islamabad Airport or bus terminal or hotel to NUMS Secretariat & back.
 - 2) Daily local purchase of stores and food material for tea bars from market and collection of food from AMC Officers Mess and other messes (when required).
 - 3) Deposit/ drawl of cash from banks.
 - 4) Conveyance of staff for meetings at various ministries, institutions, PMDC, HEC and other places at Rawalpindi/ Islamabad.

- 5) To visit workshop/ service station/ petrol pumps for oil changing, repair, maintenance and petrol filling.
 - 6) Out Station Move: For outstation duty, sanction of competent authority will be obtained by user Directorate, after getting availability of transport from Adm Directorate.
 - 7) For any other duty, approval of Director Administration will be obtained.
- c. Vehicles required by any other Directorate will be intimated to Dy Dir Adm well in time on prescribed requisition form (Attached Appendix I)
 - d. Move of vehicle for administrative duties at night is restricted except in emergency and with prior permission of Director Administration.
 - e. **Safe Custody of Vehicles & Document**

Vehicles will be parked in the Secretariat (preferably under shed). Security staff will be responsible to look after safety of vehicles. Safe custody of documents is responsibility of Driver and Store man. Proper Log Books of the vehicles be maintained with trip sheets by the driver of each vehicle. Vehicle trip sheet record will be signed by Dy Dir Adm daily.

f. **MT Accidents**

In the event of any MT accident, matter will be intimated to Dir Adm & DY Dir Adm immediately. Followed by verbal information, written "Occurrence Report" will be initiated by Dy Dir Adm. Registrar/ Director Administration will decide if any inquiry is required to be held to ascertain facts relating to the accident, damage and apportioning blame.

g. **Maintenance and POL Record**

- 1) For each refueling of fuel and oil/ filter change, Adm/ Transport Supervisor will accompany the driver. Bills of the fuel and oil/ filter will be signed by Dy Dir Adm and process for payment. Record of fuel and oil/ filter will be properly maintained in POL ledger.
- 2) Initial maintenance and regular periodic maintenance shall be responsibility of Adm/ Transport Supervisor and concerned driver. Record of maintenance shall be entered on Log Book.

h. **Registration and Insurance of Vehicles**

- 1) NUMS vehicles will be preferably registered in ETO Office Islamabad at the earliest possible time after purchase to obtain official registration number.
- 2) Vehicles will be insured with companies of repute after obtaining due approval of competent authority.

5. **Judicious Use of Paper in Academia**

- a. In order to discourage deforestation and ensure sound protection of forests for the purpose of environmental safety and ecological upgradation, a national level policy-based measure has been introduced to economize on the use of paper and paper

products. In this regard, the Higher Education Commission has issued consolidated guidelines. In order that these guidelines are followed properly, the following instructions are issued for compliance by all NUMS' offices: -

- 1) Printing/photocopying/duplexing should be done on both sides of paper when appropriate.
 - 2) Under MS Word, the side margins of the paper should be kept at 0.75" or alternatively at 0.5".
 - 3) Font size should be kept at 11.5 points.
 - 4) Line spacing should be reduced to 0.95".
 - 5) A labeled box for recyclable used printed paper be affixed prominently in each department (Empty A4 paper boxes can be used for this purpose).
 - 6) All team members to ensure weekly sorting of their desks / trays and make them clutter free so that all one sided papers can be used to print meeting minutes, letters, IONs, Program agenda or any other necessities to be shown as draft versions.
 - 7) Confidentiality of any document before reusing shall be ensured.
 - 8) Used paper side shall be invariably crossed to avoid any ambiguity.
 - 9) All class assignments should be submitted electronically.
 - 10) Internal office communication should be made electronically.
 - 11) Research work should be saved and submitted on CD.
 - 12) A digital archive should be developed and maintained in every office, cell, section, branch, department.
 - 13) The students should be sensitized about the factum that grades are determined not by the number of pages but by the relevancy and quality of the content.
 - 14) All staff should be persuaded and advised to optimally economize the use of paper and paper products.
 - 15) The case files should be moved carefully and file covers should be changed only when essentially required.
 - 16) Recyclable paper waste should not be disposed of as garbage; instead arrangement should be made for its proper selling to the vendors of recycling materials after necessary defacing, tearing or shredding.
 - 17) The person in-charge of the stationary and other related stores shall keep watch on the stationary recipient offices so as to ensure that paper and paper products are not issued beyond essential and truly justifiable requirements.
- b. The SoP Shall be implemented in true letter and spirit by all concerned.

6. Local Purchase of Equipment Projects (Up to Rs 5 Lac)

- a. Initial estimation to be done on the basis of market rates where required.
- b. Seek Administration approval from the competent authority (i.e. VC NUMS).
- c. Pre-qualify the registered panel of NUMS for service providers as approved by respective Directorates (i.e. Director Administration for Local Purchases / Procurement and Director Projects & Planning for Engineering Services).
- d. Seek quotations from pre-qualified panel bidders.

- e. Bids / quotations to be opened under supervision of Local Purchase Committee (LPC) under Administration Directorate.
- f. Comparative Statement (s) to be prepared by Local Purchase Committee (LPC) / Bids Opening Committee under Administration Directorate.
- g. On approval, work order to be placed to respective bidder who is recommended as the lowest, reasonable and responsive bidders as evaluated and recommended by the committee.
- h. Works to be completed as per given time lines.
- i. Quality of works to be inspected as satisfactory. Completion Report should be issued by Administration Directorate.
- j. On submission of Contractor's bills to be processed by Administration Directorate for final payment as per accepted bids.
- k. Completed works to be taken over on charge and inventoried.
- l. Prompt record keeping of all procurements to be maintained by Administration Directorate.

7. Local Purchase of Equipment Projects (Above Rs. 5 Lac)

- a. Necessity of work to be found and processed for approval by the competent authority (by Administration Directorate)
- b. Work to be advertised in the NUMS and PPRA website up to Rs. 2 million, and print media for beyond Rs. 2 million in local newspaper.
- c. Panel of contractors to be approved as per Pre-Qualification Register (with all pages initiated/ stamped and certified).
- d. After approval, the TOR/ Tenders should be issued to pre-qualified panel bidders.
- e. Quotations/ bids to be opened by Bid Opening Committee.
- f. Bids/ Quotations to be opened under supervision of respective committee (i.e. Procurement Committee or NUMS Bid Opening Committee for Engineering Services).
- g. Comparative Statement(s) to be prepared by the Evaluation Committee.
- h. Upon approval by Director Administration, the work order(s) to be placed to the bidder recommended as the lowest, reasonable, and most responsive bidders, as evaluated and recommended by the evaluation committee.
- i. Works to be completed by the contractors as per given time lines.
- j. Quality of works to be inspected as satisfactory by Administration Directorate. Accordingly, the Completion Report should be issued to the contractor by Administration Directorate.
- k. Contractor's bills to be processed within stipulated period.
- l. Completed works to be taken over on charge and inventoried by Administration Directorate.

8. Protection Against Sexual Harassment Policy

<https://www.hec.gov.pk/english/services/Documents/SEXUALHARASSMENT-POLICY.pdf>

9. NUMS Grievances Policy

a. Introduction

- 1) National University of Medical Sciences (NUMS) recognizes that problems, complaints, or grievances might arise in the daily working relationships between faculty, staff, and students. The Grievance Policy is an umbrella that covers the interest of all students and employees of NUMS and provides a way to bring forward problems, complaints, or grievances. The purpose of formulating this policy is to achieve consistent treatment in the handling of grievances and provide a procedure to follow in the event if any grievance arises.
- 2) A grievance is any problem, concern or complaint about something that is believed to be unfair, unjustified or wrong. A grievance can relate to almost any aspect of organization, and may include:
 - a) Adverse changes in employment conditions, health and safety, harassment, violence including bullying and ragging, supervisor behavior and/or supervision related issues or vice versa, grievances between colleagues, discrimination based on race, color, sex, gender, religion, age, marital status, nationality, disability, veteran status, or any other basis
 - b) Leave allocation, rosters or hours of work, performance appraisal, staff development or training, transfer or promotion, wage or salary levels

b. Aim

To lay down a broad framework of grievances policy and functioning guidelines for NUMS Grievances Redressal Committee.

c. Definitions

- 1) Unless the context otherwise requires, the following expressions shall have the meanings hereby respectively assigned to them:
 - a) **Associated Institutes/Colleges:** All educational institutes or colleges associated with the University, whether affiliated or constituent.
 - b) **Competent Authority:** Relevant authority authorized to approve or issue orders pertaining to any specific matter or matters.
 - c) **Constituent College:** College or institute in the health studies, by the whatever name described, maintained and administered by the Armed Forces, designated so by the Board of Governors, vide Sec 2 clause (ix) of NUMS Act 2015.
 - d) **Department Head:** The in-charge of a department, whether academic or administrative, being run at University Campus, by whatever name or designation.
 - e) **Department Executive:** Department Head with executive/ administrative authority/responsibility.
 - f) **Grievance Redressal Committee:** The Grievance Redressal Committee

established/constituted by the Vice Chancellor on the commencement/ implementation of this policy

- g) **NUMS Act:** National University of Medical Sciences Act, 2015.
- h) **Registrar** appointed under Section 13, NUMS Act, 2015.
- i) **University:** National University of Medical Sciences established under the NUMS Act, 2015.
- j) **Vice Chancellor:** Vice Chancellor of the University appointed under section 10, NUMS Act, 2015.

d. Scope

- 1) The Grievance Policy applies principally to employees and students of NUMS including faculty and staff. This policy also applies to those who interact with the NUMS or its affiliated programs. Any member of the NUMS community, including but not limited to students, employees, and alumni, has a right to express a grievance.
- 2) This policy applies to all university-related activities both on and off campus and applies to all individuals involved in these activities, as well as to the conduct by or directed toward third parties, which are not themselves employees or students of NUMS.
- 3) It covers individual grievance of specific nature raised individually by the concerned stakeholder only and not the grievances of general applicability or of collective nature or raised collectively by more than one stake holder.
- 4) This procedure does not apply to complaints, grievances or appeals where other policies or procedures are in place like sexual harassment, dismissal or disciplinary action; or where the grievance relates to matters that are already being considered pursuant to another policy or procedure.
- 5) It can be changed/amended at any time, when deemed necessary, with the permission of the Vice Chancellor NUMS.

e. Terms of Reference - Employees

f. Policy Statement

The University is committed to promote effective working relationships and create an environment in which employees feel comfortable to raise work related issues with their executives and achieve an appropriate and prompt resolution to individual grievances.

g. Grievance Redressal Committee

- 1) A Grievances Redressal Committee (with a president and two members) will be constituted through an office notification by Registrar Office, for a period of one year. At least two co-opted members will be included in the committee by its president, one of which will be a legal officer.
- 2) Employees must raise their grievance(s) without unreasonable delay.

h. Early Resolution

- 1) This procedure should not be used as a substitute for normal day- to-day issues. Wherever possible, concerns raised by employees should be resolved informally at department level, without recourse to formal procedures.
 - 2) The University encourages its students/employees to resolve any concerns, which arise in the workplace, at the earliest opportunity and are encouraged to discuss their concern(s) with their department executive in the first instance.
 - 3) Executives shall be responsible to address the employee's concerns appropriately and promptly. Where a concern has been resolved as a result of such discussions, it may be helpful for the Executive to confirm their understanding in writing to the employee to ensure that there is a common understanding of the outcome.
 - 4) If, following discussion about the grievance(s) or where the concern(s) raised involve interpersonal relationships, the Executive considers it appropriate, they may decide to facilitate the discussion between concerned parties or refer the matter to Grievance Redressal Committee.
- i. Adoption of either of these routes is voluntary and will only take place if all parties agree. It is, however, hoped that employees will recognize the benefits of seeking to resolve issues by either of these routes and will be amenable to and cooperate with this approach.
- j. **Formal Procedure**
- 1) Where the grievance raised is not capable of early resolution, the employee should raise the matter formally, in writing, with the Grievance Redressal Committee within fourteen working days of the act(s) taking place or the date of the last informal meeting at departmental level.
 - 2) The employee should set out the nature of the grievance, the evidence on which it is based and the remedy sought.
 - 3) On receipt of a letter setting out a grievance, the employee will be asked to attend a formal Grievance Redressal Committee meeting in order to discuss the grievance. This meeting will normally take place within fourteen working days of the receipt of written grievance.
 - 4) As a result of the first Grievance Redressal Committee meeting, the president of committee may determine that:
 - a) further investigation is required to ascertain background facts of the allegations and may appoint an investigating officer, amongst the committee members,
 - b) grievance is vexatious or trivial in nature and may dismiss it without further consideration. The employee will be advised accordingly, in writing,
 - c) the grievance needs to be dealt with pursuant to alternative university procedures.
 - 5) Where the grievance relates to other employees, the individuals involved will be informed in writing of the nature of the grievance and will be given an opportunity

to submit a response.

k. Investigation

- 1) If an investigation is deemed appropriate, the Grievances Redressal Committee will gather facts about the complaint, through relevant sources, in a fair and objective manner to work out a resolution of the issue.
- 2) The Committee will exercise its authority objectively and honestly, thoroughly studying the grievance and taking in to account its significance and consequences both for the complainant as well as the institution.

l. Outcome

- 1) The Committee will determine the outcome of the inquiry. It may reject the grievance, or may uphold the whole or parts of the grievance. Findings along with recommendations will be put up to the Vice Chancellor, for his approval.
- 2) The decision will be communicated to the parties to the grievance in writing within 7 days of its approval.

m. Appeal

- 1) If the grievance remains unresolved and the employee who brought the grievance wishes to take further action, the employee may write to the HR Directorate, within 14 days of the date of the receipt of the decision, to exercise his/her right of appeal. The employee must identify the part(s) of the grievance that remain unresolved and the remedy sought.
- 2) Appeals will be handled by an Appeal Officer, nominated by the Vice Chancellor amongst the senior executives. The Appeal Officer, nominated, will have had no prior involvement in the case and will be supported by a member of the HR team.
- 3) The Appeal Officer will meet with the employee in order to discuss the appeal. The meeting will normally take place within 14 days of the written acknowledgement of the appeal.
- 4) As a result of the meeting, the Appeal Officer may re-investigate the allegations made by the employee. He will put up his findings and recommendations to Vice Chancellor for his decision, which will be deemed final.

n. Terms of Reference - Students

Associated Colleges/Institutes

- 1) A Director Student Affairs, nominated by the Principal/Dean, shall be responsible to address the grievances/complaints of the students from associated colleges/institutes, at the initial stage.
 - a) A student will file a complaint in-writing to the Office of the Director Student Affairs/Dean/Principal. In case of online submission, the email shall be forwarded to the DSA, with information to the Dean/Principal of the institute.
 - b) The Director Student Affairs shall be responsible to inform the Principal/Dean about any cases related to the grievance of the students from time-to-time.

- c) He may contact/consult directly any personnel of the institute, either teaching or non-teaching, for confirmation/sorting out of any issue related to the grievances/ complaints of the students.
- d) If the matter is not resolved, the concerned Dean/Principal may form a committee to resolve the issue. The committee will submit its recommendation to the Dean, for which the decision of the Dean shall be considered final.
- e) The grievances of NUMS students and employees studying/working at associated colleges will be dealt with by the respective institutes.

2) NUMS' Departments

Key Person nominated by the Dean NUMS, will address the grievances/complaints of the students of various Departments of NUMS. However, if the matter is not resolved, the Dean may refer the issue to, or the student may directly approach, Grievances Redressal Committee of NUMS. The committee will submit its recommendation to the Dean, for which the decision of the Dean shall be considered final.

o. Students' Grievance Committee

Composition:

- 1) Head of Institute/Dean as Chairperson.
- 2) Two faculty members one of them preferably be HOD
- 3) Controller of Examinations.
- 4) Deputy Director of Student Affairs.

Terms of Reference

To redress genuine grievances of students about any course, grade, cancellation of registration or any other bona-fide issue.

10. Zero Waste Management Policy

a. Purpose

Climate change is an existential threat and educational institutions are also expected to respond to these growing challenges. Hyper consumerism coupled with over-population is resulting in huge amounts of poorly managed waste, which not only threatens the climate but is also leading to the depletion of finite resources on the planet. This document sets out the National University of Medical Science's pledge, policies, and procedures regarding materials management with an end goal of 'Zero Waste'.

For this policy document, Zero Waste Management will refer to the procedures and practices designed to achieve a reduction in resource consumption, an increase in resource reuse, waste reduction, diversion, and mitigation of greenhouse gas production.

This document addresses the requirements of the relevant national and international regulations, strategies and action plans including, National Environmental Policy 2005, Pakistan Climate Act 2017, United Nations Sustainable Development Goals (SDGs 2030).

b. Scope

All staff, faculty, and students at the National University of Medical Sciences, or anyone, involved in the evaluation, formulation, revision, approval, issuance, or maintenance of National University of Medical Sciences Policy statements, on behalf of the National University of Medical Sciences.

The Zero Waste Management Policy provides broad guidelines for the National University of Medical Sciences, for addressing environmental concerns arising due to waste mismanagement, and ensuring effective management of its environmental resources. The constituents and affiliates of the National University of Medical Sciences however, may devise their own strategies, plans and programs in pursuit of this Policy.

c. Pledge

National University of Medical Sciences pledges to go Zero Waste in fulfilment of its environmental and social accountability.

This policy sets a goal of 90% waste diversion from landfill sites by the National University of Medical Sciences by June 30, 2025, with additional efforts to reach 100%, as technology becomes available.

d. Policy

The National University of Medical Sciences is committed to resource conservation, sustainability and environmental stewardship. In fulfilment of its pledge, it shall take steps to implement Zero Waste Management, which includes the components of Hierarchy of Zero Waste that is reduction in waste generation, segregation of waste at

source, and its proper diversion and disposal¹. It shall also include motivating behaviour change in individuals, departments and directorates to adopt Zero waste practices - 5 Rs of Zero waste viz Reduce, Reuse, Recycle, Rot (Compost) and Raise Awareness. Aim of Zero Waste management and 5 Rs of Zero Waste practices is reduced consumption, environmentally preferable purchasing, resource conservation and Zero Waste materials diversion practices, and opportunities in accordance with observed needs.

The goals of this policy include

- 1) Building culture in the University, where Zero waste and other environment friendly practices shall be reflected in its policies. These practices shall be promoted and adopted at all levels, including all departments and directorates, academic and non-academic staff, and students and its constituents and affiliates.
- 2) Development of infrastructure around a system of material management and Zero-Waste principles
- 3) Accessibility, functionality and convenience of environmentally preferable policies and practices
- 4) Updating waste tracking data
- 5) Implementation of procedures laid out in this Zero Waste Management Policy

e. Commitment to Materials Management and Landfill Waste Hierarchy

National University of Medical Sciences understands that daily campus management (including campus purchasing, building operations and maintenance), can generate significant quantities of waste and that waste can be a resource. Additionally, the National University of Medical Sciences acknowledges that the disposal of solid waste in open dumps, landfilling or incineration produces pollution and green-house gas emissions and should be avoided to the maximum extent possible. If disposal is necessary, the National University of Medical Sciences recognizes that prior to choosing a final disposal method, conversion technologies and other strategies must be scrutinized and should not impact the environment negatively. The National University of Medical Sciences will, therefore, manage its waste stream in an environmentally responsible manner by following the principles of Zero Waste Management.

f. Exclusions and Special Situations

National University of Medical Sciences Policy Statements may not cover all administrative matters at the University. The intention is to eventually have all Policy Statements in the National University of Medical Sciences Policy Library. However, in the transition phase, some statements may be located in other sources such as the Office of Academic Affairs, Administration, Events and Human Resources. Some administrative information may not be formalized into Policy Statements and will be contained in handbooks, catalogs, etc. such as the Student Handbook.

¹ <https://zwia.org/zwh/>

g. Procedures and Practices

In this policy document, Zero Waste Management will refer to the procedures and practices designed to achieve a reduction in resource consumption, an increase in resource reuse and reduction of waste being sent to landfill sites. These activities are intended as a hierarchy of approaches to materials management with the end result of Zero Waste.

These activities include following:

- 1) Ethical Sourcing- Environmentally preferable purchasing
- 2) Segregation of waste at sources into
 - a) Recyclables (Plastics, Glass, Metal)
 - b) Compostable (Food and Garden Waste)
 - c) Landfill waste.
- 3) Proper Disposal
 - a) Recycling- Recyclables to be sent to relevant facilities for recycling in an environment friendly manner
 - b) Composting (Rot)- Establishment of facility
 - c) Landfill- landfill waste if generated should be send to scientifically developed landfill sites.
- 4) Promotion of 5 Rs of Zero Waste practices to motivate change in behaviour of individuals and thereby develop a cultural change.
- 5) These 5 Rs are
 - a) **Reduce**- Discouraging use of single use products at every level. Reducing the use of paper and any non-essential items.
 - b) **Reuse**- Encourage use of reusable and sustainable items. By introducing eco-friendly products in the University
 - c) **Recycle**- Encouraging use of products which can be recycled
 - d) Paper, Plastics, Glass, Metal (Recyclables)
 - e) **Rot**- Composting of food waste and garden waste at the Campus
 - f) **Raise Awareness**- Through workshops, talks, webinars, conferences, posters, campaigns and the University website(hyperlink) - *Environmental Stewardship- at NUMS - Website shall contain relevant information and resources like awareness videos, updates, brochures, posters, events, interviews, calendar.
- 6) Waste tracking and audit.

(Also see Resources- 'Procedures, Practices and Responsibilities at National University of Medical Sciences')

11. NUMS Media Policy

a. Introduction:

NUMS Media Policy is all encompassing for image building and perception management in order to achieve its goals. Image building is a long and slow process of creating a positive perception about an institution or an organization by showcasing important

activities of the institution through mainstream media including, of course, all tools of social media which has now emerged as a driving force in this regard.

Public Affairs Directorate engages with varied stakeholders like government organizations, business groups, pharmaceutical businesses, academia, media groups and maintains connectivity with them for strategizing and promoting NUMS objectives.

It is through timely dissemination of factual and concise information on the institutional activities, seminars and conferences organized by NUMS from time to time which helps develop positive perception with the decision makers and public at large.

It is imperative to develop networking with the print, broadcast and social media for NUMS institutional image building and perception management.

At the same time Public Affairs monitors, assesses and provides feedback to the Senior Management on what appears at various media platforms about NUMS, to promptly rebut/clarify any negative trend being fanned out by any media platform.

Public Affairs mounts special efforts to showcase NUMS as a pioneer in promoting research and innovation to explore new horizons in the medical field.

b. Vision

1. We envision the National University of Medical Sciences(NUMS) growing as a market leader in medical, paramedical (allied), and research domains at national and international levels.
2. We shall strive to reflect NUMS's achievements and contributions at the right time and place.
3. We endeavor to establish cooperation and coordination with medical academia and research (Multidisciplinary) in Pakistan and the world over on behalf of NUMS.

We would coordinate with the internal and external stakeholders to make autonomous systems for the optimistic image projection of NUMS.

c. Mission

"The National University of Medical Sciences' Public Affairs and Media team aims to build a robust image of NUMS in academia, reflecting upon its dedication to establishing research-led higher educational institutions par excellence, mainly in medicine and allied fields. We are confident that we, with our dedicated team, will prove equal to the challenge."

d. Goals

The Public Affairs and Media team aims to build a **Positive Image** of NUMS through:

- Developing strong collaborative partnerships between internal and external stakeholders.
- Building the Real Image of NUMS.
- Preventing and Reforming the Negative Perception towards NUMS.

e. Objectives

- i. To make NUMS a market leader in medical, paramedical (Allied), and research domains at national and international levels.
 - ii. To reflect NUMS achievements and contributions at the right time at the right place
 - iii. To establish cooperation and coordination with Medical Academia and Research (Multidisciplinary) in Pakistan and the world over on behalf of NUMS
 - iv. To coordinate with internal and external stakeholders to create self-sustaining systems for projecting NUMS' positive image.
- f. **Brand Identity:**
The Public Affairs Directorate has been entrusted with maintaining various facets of Brand Identity.



Humans have been expressing themselves through symbols and pictures since the beginning. From simple stick figures carved on the walls of Ice Age Caves to complex geometric patterns of Mayan temples and from the hieroglyphics of Egyptian pyramids to the Arabesque decorative patterns at the Alhambra, the signs of our innate desire to speak through shapes and images are spread throughout history. The practice continues.

We have come a long way since our first Hematite and Charcoal drawings. Now, we communicate through well-thought-out and well-designed visuals. Concepts and logic have become an integral part of modern non-textual communication, including logos, emblems, and insignias. Our logo at NUMS is no exception. The key inspiration behind the creation of the NUMS' identity is an Ayah from the Holy Quran

إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ ﴿٣٠﴾

Allah said, "Indeed, I know that which you do not know" (Al Quran; Surah Al-Baqarah Verse: 30)

The blue-green colour of the logo relates to the spiritual bonding with the Gumbad-e-Khazra, the green dome of the tomb of the Prophet Muhammad SAW, and the dominant color of the Pakistani flag. It also signifies freedom, spirituality, serenity, and nature's healing power.

The blue-green semicircle on the lower left represents a crescent, after the same style of our national flag. The setting moon indicates a solution or cure rather than a rising one, which would stand more with rising problems or diseases. The hollow White core symbolizes the creation of the universe. The Golden color of the inner circle glorifies the arrival of life and wisdom spreading like the rays of the glowing sun in this world of darkness. The outer circle in blue-green implies humanity and stands for humanity's faith and confidence in the Creator.

The Ayah, which literally means "Indeed, I know that which you do not know," has been symbolized through an artistic design in NUMS' logo.

- g. **Media Policy for Overall Operations**

Media policy aims to set the tone of communication regarding its laws, regulations, policies, and other fundamental disclosures with the general public, media, and stakeholders.

- i. As a Federal Government Chartered University, we comply with all laws and regulations regarding public disclosure of material, events, financial reports, and operations of HEC and ISPR.
- ii. As per HEC's IPE standard 9: Public disclosure and transparency, the non-confidential information in all stakeholder communication should be reliable, accurate, fair, and timely.
- iii. All the information, which is non-confidential and dictated by senior administration to be in light of a legitimate concern for stakeholders, the general public and the media, will be voluntarily disclosed.
- iv. An approved Media Relations Officer or assign (spokesperson) will convey all revelations to the media university, official social media accounts, reports, and press information. The media must follow the review and approval protocols.
- v. All the university's public disclosure of information through media must follow the review and approval protocols.
- vi. The relevant designated experts will compile and communicate all sensitive/technical information disclosures, including laws and regulations, academic policies, curriculum, results, merit lists, financial, audit and performance evaluation, and tender notices.
- vii. The Media Policy applies to all University employees, as well as all constituents and affiliates, for their reference to the university.
- viii. The University management will guarantee that this policy and related procedures are conveyed and pursued consistently in their undertakings.
- ix. Likewise, most of the organization's approaches treat non-compliance as severe, resulting in disciplinary action and exposing the employee to standard and criminal risks. All representatives must be familiar with the policy.

h. Policy for Internal Operations

Public Affairs policy for internal operations pertains to information disclosure and relationship building among the university directorates, constituent, affiliates and teaching and training hospitals.

a) Official Website

As per HEC IPE Standard 9, university is bound to publish information through its website, print media and communication that is important for students and stakeholders in making informed decisions.

All the university constituents, affiliates, teaching and training hospitals should have a dedicated and up to date official website.

b) Approvals and Handling of Website

- a) In order to launch a new website sponsor institute will identify aim and need for website and will get the approval from competent authority of NUMS by initiating a minute sheet.
 - b) Sponsor institute will identify a focal person from their organization, for future website handling preferably from web development background.
 - c) After approval, sponsor organization will be responsible for preparation of website, selection of host agency and launching of website.
 - d) Sponsor Institutions will be reasonable for uprising NUMS Public Affairs department regarding any future website related amendments.
 - e) Sponsor Institutions organizations whose website handling rights lies with NUMS Public Affairs department will be responsible for sending information, to be uploaded on website periodically.
 - f) All the departments within NUMS will be responsible for sending information about the ongoing activities and events to be upload on website.
 - g) All the institutes will design and document a Standard Operating Procedure(SOP) for website handling for smooth functioning.
 - h) All institutes will make sure to keep the backups of their websites in hard drive.
 - i) All the constituent, affiliated institutes, teaching & training hospitals and Journal websites should be linked to NUMS official website.
 - j) NUMS Public Affairs department is responsible to maintain and update directory of all related websites and carry out periodic security tests (*request to IT as per cyber security policy if any*)
- c) Security Audit Checks**
- a) Responsibility for security of website and host agency lies with the sponsor institute and in case of NUMS, official website lies with NUMS IT Cyber security domain.
 - b) Sponsor institution will be responsible for devising policies and SOPs for content disclosure, update, monitoring, maintenance, management and backups of website in coordination with NUMS.
 - c) In case of any cyber-attack request to IT as per cyber security policy if any? (Or suggestions from IT department to avoid injections)
- d) Official Social Media Networks and Over the Top Applications**
- (1) Social Media**
- Social media is the set of tools for new form of online communication or channel, which provides two-way communication to the users and helps them stay, connected e.g. Facebook, Twitter, Google+, Linked in etc.
- (2) Over the Top Applications**
- An over-the-top (OTT) application is any application or service that provides a product over the Internet typically related to media and communication and if not always, are generally lower in expense than the conventional strategy for conveyance e.g. WhatsApp
- (3) Types of Social Media and OTT Applications**

Following applications are mostly used officially:

- 1) Facebook
- 2) Twitter
- 3) Google+
- 4) YouTube
- 5) Instagram
- 6) LinkedIn
- 7) Skype
- 8) WhatsApp

(4) Social Media Policy

Social media is a prime source of social engineering and its effective use plays a vital role in perception building, agenda setting and public advocacy for any organization. Public Affairs Directorate effectively uses all social media platforms for dissemination of information by offering a platform to support that information with "real time" interactions.

- (a) There is a potential of information widespread regardless of its authenticity and truth-value in seconds while using social media networks so there is a risk association.
- (b) In order to eliminate the chances of association with false information or avoid endorsements and promote transparency. The university has official social media pages which are the only credible channel of information and news disclosure.
- (c) The approval of content to be uploaded on these official social media pages is done through a proper channel as per SOP, usually the information goes on website is also followed/ uploaded on various social media platforms.
- (d) All the institutes in case of opting information disclosure via official social media networks will be responsible for maintaining, handling and content creation of their social media pages and devising SOPs.
- (e) These accounts will also provide the insight via an administration panel so that we can measure our results about our reach, fans, people and organizations connect with our pages, their interests etc. which ultimately give us a better understanding of our stakeholders/ audiences for better future strategies.

(5) Prohibited Activities

Following points to be considered while using Social media networks (SMN):

- 1) Employees must refrain themselves from sharing any news, schedule, pictures or any other official or restricted data/information related to NUMS or management of NUMS, which is at the risk of misuse by any individual, agency or organization.
- 2) For official information, only official email accounts allotted by organization are to be used.

- 3) Friends and family must be educated to refrain from sharing any news, pictures or any other material related to NUMS from their respective SMN accounts.
- 4) Be responsible while sharing any kind of information on your personal social media accounts once you have declared your association to the organization.
- 5) Forwarding unauthenticated information circulating in SMN /OTT /groups etc. is strongly discouraged.
- 6) Creation of fake accounts using organizations name is strictly prohibited.

(6) Security Audit Checks

In case of coming across any fake news, source or account related to university should be reported to NUMS Public Affairs department immediately.

The hard form repository will be maintained of a document listing all the social media accounts, departments having their access and passwords, which will be changed every 15 days.

(7) Email Signature

All the NUMS employees should make their email signature as per the given template.

Name of the Employee

Designation

Department

phone: +92 00 000000 | Ext: 000

website: <http://numspak.edu.pk>

follow us: [Facebook](#) | [Twitter](#) | [LinkedIn](#) | [YouTube](#)

(8)

Media Policy for External Operations

(a) Registrar Office Communication:

Conference/ Seminar/ Roundtable/ Speaking Opportunities/ White Papers/ Opinion Pieces/ Delegation visits, Acquisitions, Partnerships, Subsidiaries and associates/ MOUs/ DOUs are the modes of external communication which are specialized and sensitive in nature and are to be handled via Registrar's office.

(b) Crisis Communications

An effective communication procedure is a key aspect of a powerful reaction to and recuperation from a crisis. As the circumstance unfurls the need to convey is quick and will proceed within a few days after, numerous NUMS constituents must come up with explicit data. Message consistency is essential for NUMS correspondence methodology during crisis. The University's image can be emphatically or contrarily affected by open view of how an event is taken care of. Recorded underneath are steps to be trailed by NUMS delegates right away following a crisis or emergency.

The crisis and emergency correspondence approach helps arrange inside and outer interchanges inside the NUMS people group in Pakistan and abroad. This arrangement doles out duties regarding formulating and implementing an occasion explicit emergency correspondence strategy. It additionally guarantees that NUMS delegates and those following up for the benefit of NUMS in Pakistan and abroad, know about techniques and with their roles, especially amid a crisis.

12. **Policy on drugs and tobacco control at HEIs**

<https://www.hec.gov.pk/english/Documents/Policy%20on%20drugs%20and%20tobacco%20control%20at%20HEIs.pdf>

CHAPTER-VIII QUALITY ASSURANCE POLICIES & GUIDELINES

1. NUMS Quality Policy

The National University of Medical Sciences (NUMS) is committed to continually enhancing the quality of life through the provision of the best possible education, the conduct of high-quality research, and healthcare services by meeting world-class standards and following ethical practices in the fields of medical, allied health, and social sciences, making Pakistan and the world a better place to live.

NUMS aims to understand and improve life through the pursuit of excellence in improving existing knowledge and its application. NUMS utilizes innovative and creative techniques and collaborative research in biomedical engineering and technologies, as well as veterinary, biogenetic, social, and behavioral sciences, offering the best possible services to society and humanity.

2. NUMS Policy for Self-Assessment of Academic Programs

(PhD /MPhil /BS equivalent (semester based) MBBS/BDS (annual based system)

a. Introduction

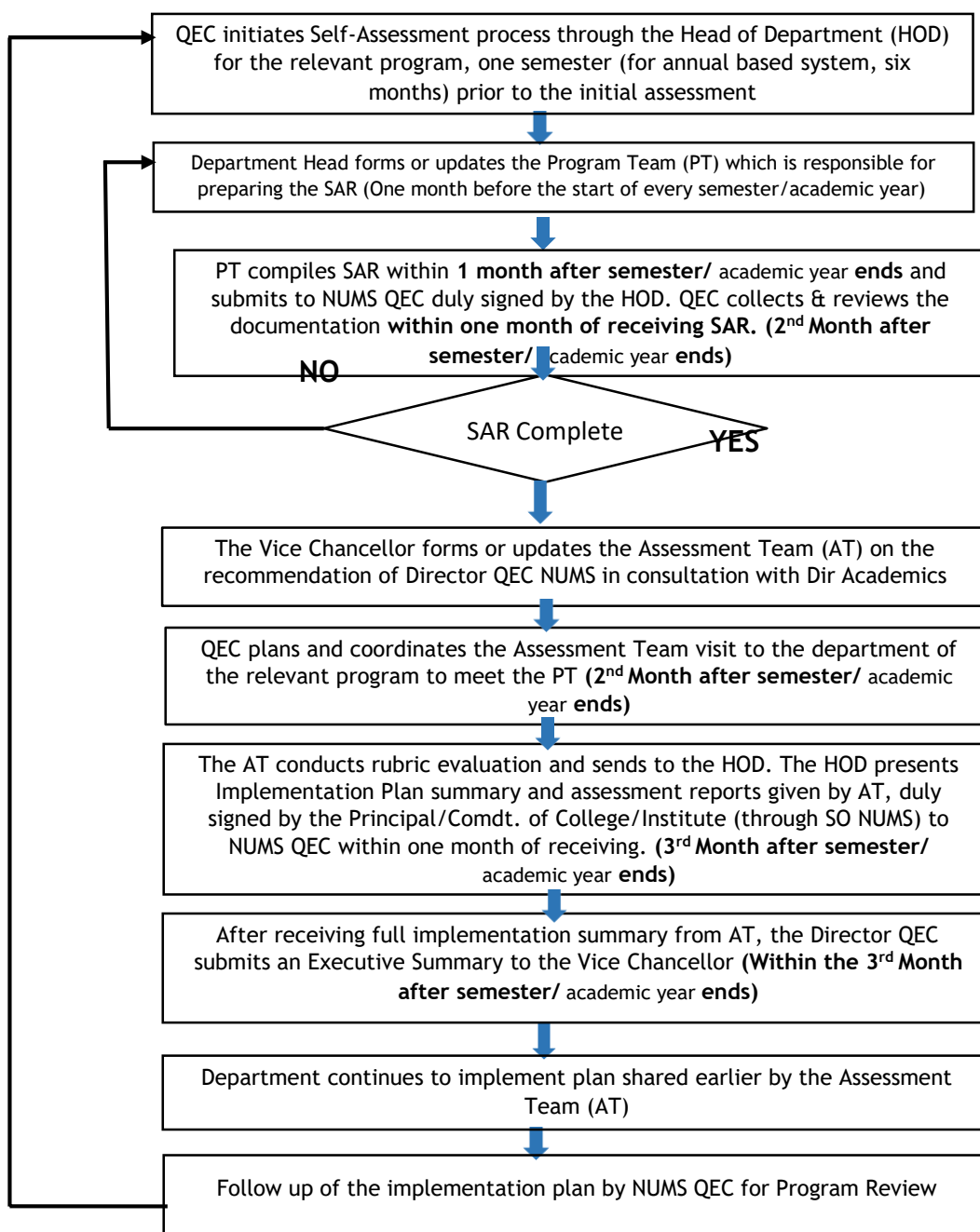
Assessment is a systematic process of gathering, reviewing, and evaluating academic programs, using important quantitative and qualitative data and information from multiple and diverse sources, with the purpose of improving student learning and determining whether academic and learning outcomes have been met as per prescribed criteria and standards.

Self-assessment is a powerful tool, empowering the faculty and administration to internalize academic quality assurance. It provides valuable feedback, enabling them to initiate action plans for improvement. Each department takes the lead in this process, initiating self-assessment before the start of the semester/academic year (Ph.D. /M. Phil /BS equivalent (semester-based) MBBS/BDS (annual-based system) by developing/evaluating their programs based on HEC's 8 criteria, 31 standards and 10 proforma.

b. Purpose

The purpose of the self-assessment process is to ensure the high academic standards of NUMS Academic Programs registered on the Pakistan Qualification Register (PQR).

c. Self-Assessment Process Flow Diagram:



d. Procedure to follow in Self-Assessment Process

Following are the steps to be followed for the self-assessment of any program in each semester are:

1) Initiation of Self-Assessment Process:

To initiate the process, the Head of department (HoD) of each discipline shall be responsible for forming a program team for a new academic program **update*** any changes in the **Program Team** already formed and nominate the **Program Coordinator** for their respective program at least one month before the start of each semester/ academic year. The program team shall comprise at least three faculty members,

including the Head of Department (HoD), senior faculty member and Program Coordinator.

**Updating of nominated PT before SAR is only required because of change/posting (uniformed officers) of a PT member nominated earlier or based on performance.*

2) Responsibilities of Program Team/ Coordinator:

- a) Program Coordinator shall be responsible for liaising and regular coordination with all the concerned to facilitate the timely and trouble-free successful completion of the program. He/she is responsible for the smooth implementation of his/her respective program in accordance with the prescribed criteria.
- b) Program Coordinator shall send **list of all courses** to be offered and course instructor against each course, to Academic Directorate duly signed by the respective HOD at least one month before the start of the semester /academic year.
- c) Program Coordinator shall also send updated **list of faculty (Annexure-K)** of their respective program at the start of each program and if there is any addition/removal of faculty, shall be shared with Academic Directorate.
- d) All approved list of courses & updated list of faculty shall be shared with QEC NUMS 15 days before the start of the semester /academic year.

3) Quality Assurance Facilitator:

A designated **Quality Assurance Facilitator** from NUMS Quality Assurance Directorate will work in close coordination with each designated Program Coordinator to smoothly complete the processing of the SAR and answer any query regarding compilation of SAR and filling of feedback proformas.

4) Responsibility of Program Team:

The responsibilities of the Program Team are as follows;

- a) Program team shall **review the curriculum** of already running programs before the start of each semester/ academic year based on previous SAR report and incorporate changes if needed. This improved version shall be sent to the Academic Directorate duly signed by the HOD at least one month before the start of next semester/ academic year.
- b) Program team shall be responsible for the implementation of curriculum and will duly ensure that the learning objectives are duly met as desired.
- c) Each Course Instructor shall maintain **Course File** throughout the semester/ academic year/ **attached as “Annexure-D”**. He /she shall submit this file to the concerned HoD at the end of each semester/ academic year for record keeping purposes.
- d) The Program Team (PT) shall compile SAR within 1 month after semester/ academic year ends and submits to **NUMS QEC** duly signed by the HOD. QEC will collect & review the documentation within one month of receiving SAR. (2nd

Month after semester/ academic year ends) attached as “Annexure-L”.

- e) The Program team shall ensure that the defense of thesis of the students must be held only after completion of coursework. (including core/elective/essential courses.)
- f) All approved & updated curricula shall be shared with QEC NUMS 15 days before the start of the semester /academic year.

5) Formation of Assessment Team:

The **Vice Chancellor** forms or updates* the Assessment Team (AT) on the recommendation of **Director QEC NUMS** in consultation with **Director Academics**. The AT comprises of 2-3 faculty members (minimum 2) from outside the university, including one Program Coordinator (internal) for liaising with the AT members. The AT members must be experts in the area of the assessed program.

6) Responsibilities of Assessment Team (AT):

The responsibilities of Assessment team are mentioned below:

- a) AT shall be responsible for the rubric evaluation of Self-Assessment Report after the verification of the data/information provided by the Program Team as per Self-Assessment Manual & Rubric Format

Following points should be cross checked by the AT:

- Check completeness of Self-Assessment Report as per Self-Assessment Manual & Rubric Format.
- Evaluate responses of various criteria & standards
- Verify data/information given in SAR.
- Confirm the facts & figures provided by the Program Team
- Review the conclusion drawn by the Program Team.
- List down the findings from the assessment of program
- Carry out rubric evaluation of SAR
- Write down the AT report and comments in the Rubric Evaluation, **duly sign and stamp** the evaluation on each page with date for validation purposes.

7) Procedure to Conduct Assessment:

- a) QEC plans and coordinates the Assessment Team visit to the department with the consent of the HOD of the relevant program to meet the PT (2nd month after semester/ academic year ends)
- b) AT shall visit their respective program department on a date decided with mutual consensus between PT and AT keeping NUMS QEC in loop.
- c) Each AT member shall **conduct independent rubric evaluation** and send to HoD duly signed and stamped on every page. He/she shall also share the **recommendations for Implementation Plan Summary** to the HoD.
- d) On the basis of recommendations sent by AT members, the HoD shall formulate a **Final Implementation plan summary** and sets out a timeline for inculcating changes proposed (if any).
- e) The HOD presents **Implementation plan summary** and **Rubric Evaluation** given by AT, duly signed by the Principal/Comdt. of College/Institute (**through SO**

NUMS) to NUMS QEC within one month of receiving. (3rd Month after semester/ academic year ends)

- f) After receiving full implementation summary from AT, the Director QEC submits an Executive Summary to the Vice Chancellor (Within the 3rd Month after semester/ academic year ends)
- g) The NUMS QEC shall be responsible for follow up of the implementation plan by the departments **once a semester/ academic** year to assess the progress and later proceed for the NUMS Academic **Program Review** as per HEC requirement.

8) NUMS Anti-Discrimination Policy

a. Preamble

National University of Medical Sciences (NUMS) aims to reaffirm its commitment to build an all-inclusive and diverse community in which all staff and students are free to pursue excellence and satisfaction in their academic and occupational endeavors.

To this end, NUMS undertakes to promote all the fundamental rights and freedom of every person on campus, as protected by the Constitution and the Clause 5(1) Of Act, shielding all persons from direct and indirect discrimination by taking appropriate action against those who unfairly discriminate.

Moreover, the following United Nations' Sustainable Development Goals require NUMS to craft an anti-discrimination policy:

- 1) UN SDG 4: Quality Education - Clause 4.3.5 {Lifelong Learning Access Policy(Regardless of ethnicity, religion, disability, or gender)}
- 2) UN SDG 5: Gender Equality – Clause 5.6.1 {Women's Progress Measures (policy of non-discrimination against women)}

b. Purpose

The purpose of this policy is to explain the standard of behavior expected of NUMS staff and students _ It aims to provide an environment where employees, students, and others in the campus are treated fairly and with respect, and are free from discrimination, victimization, or vilification.

c. Scope

It applies to all admissions, employments, trainings, promotions, fringe benefits and other related personnel functions. Also, it applies to all of NUMS workplaces. including any location that employees may be considered to be carrying out work on behalf of NUMS in the course of their employment.

d. Policy Objectives

- 1) To prohibit the different manifestations of unfair discrimination, based on, but not limited to, ethnicity. religion, race, color, creed. gender, marital status and physical disability.
- 2) To prevent and eliminate any conduct of unfair discrimination by any member of NUMS community against another, which may undermine his/her human dignity. Such conduct of unfair discrimination may include, but is not limited, to bullying and /or harassment.

- 3) To clarify the procedure, the responsibilities, and the obligations of all equality in the university.
- 4) To establish appropriate and accessible interventions for staff and address allegations of unfair discrimination.
- 5) To administer employment decisions, such as compensation, benefits, promotion, transfers, layoffs, training and recreational programs, on a nondiscriminatory basis.

e. Policy Statement

“National University of Medical Sciences (NUMS) is dedicated to ensure equal opportunity for employment, education, research, innovation, and healthcare, without discriminating against any employee, student, applicant, or volunteer on the basis of ethnicity, religion, race, color, creed, gender, marital status, physical disability, or any other status protected under the state, thereby making Pakistan and this a fair place to live in.”

f. Forms of Discrimination

- 1) **Direct discrimination** occurs where a person is treated less favorably than another person in the same or similar circumstances for the substantial reason of their having or being perceived as having any of the following attributes: ethnicity, religion, race, color, creed, gender, marital status, physical disability, or personal association with someone who has one or more of the above attributes.
- 2) **Indirect discrimination** occurs when an unreasonable requirement, condition, or practice is imposed that persons with one or more of the above attributes cannot comply with, whereas most persons without the attribute can comply.

g. Actions to Prevent Discrimination

- 1) Using inclusive language in job advertisements and trainings / workshops invitations, in the light of UN SDG 4 and 5.
- 2) Setting formal job-related criteria to hire, promote, and reward employees.
- 3) Offering compensation and benefits according to position, seniority, qualifications and performance.
- 4) Accommodating people with physical disabilities, where possible.

h. Reporting Discrimination

- 1) If anyone believes that he/she is the victim of discrimination or has reason to believe that somebody else is the victim of discrimination, he/she should immediately report it to their respective supervisor.
- 2) The respective Dean / Director or his/her designee conduct an immediate and thorough investigation of the case.
- 3) Confidentiality will be maintained to the extent possible; however, it is important to recognize that those with pertinent information may be interviewed as part of the investigation, including the accused.
- 4) The results of the investigation will be reported to NUMS competent authority, who will take swift and appropriate action against any person who is found to have violated this policy.
- 5) Appropriate sanctions, ranging from a warning to dismissal, will be determined based on the severity of the conduct and in accordance with the

provisions of applicable statutes, employment contracts, NUMS policies, and disciplinary procedures for faculty.

- 6) If an investigation results in a finding that an accusation of discrimination, harassment, or retaliation was maliciously or recklessly made, a disciplinary action may be taken against the accuser.
- 7) When the investigation is concluded, the results will be communicated to the complainant, the alleged perpetrator, and, as appropriate, to all others directly concerned.

i. Dissemination of Policy

- 1) NUMS Anti-Discrimination Policy Statement (Para 5 above) shall be displayed at NUMS premises and directorates to encourage an environment free from discrimination of any kind.
- 2) This Policy Statement shall be posted on the university's official website to reflect NUMS organizational culture.
- 3) This Policy may be reviewed and revised from time to time, as required.

e) NUMS Self-Assessment Policy: -

<https://numspak.edu.pk/upload/media/NumselfassessmentpolicySAR1553855644.pdf>

CHAPTER-IX RESEARCH & DEVELOPMENT POLICIES

1. Institutional Review Board & Ethical Committee (IRB & EC-NUMS)

a) Introduction

An institutional review board & Ethical Committee (IRB & EC) is a formally designated body to approve, monitor, and review biomedical research involving human subjects. The IRB & Ethical Committee conducts a risk-benefit analysis to determine whether a research proposal is consistent with the cardinal principles of research ethics. Autonomy, beneficence, non-maleficence, and justice are essential in planning, conducting, and reporting the proposed research. All hospitals and institutes of NUMS must formulate their respective IRB & Ethical Committees, which in turn is governed by a parent NUMS IRB & Ethical Committee that shall also serve as an appellate body. The National University of Medical Sciences (NUMS) will follow the following SOP for the ethical review of multicenter/multidisciplinary national and international research based on the Helsinki Declaration and ICH-GCP (International Conference for Harmonization-Good Clinical Practices) standards.

b) Aim

This SOP aims to facilitate the effective, independent functioning of the IRB and Ethical Committee in NUMS and its constituent institutes/hospitals so that a uniform ethical review process and sound scientific procedure for biomedical research are implemented for all research proposals on human subjects and animal care.

c) Role of IRB & Ethical Committee

- 1) To ensure that appropriate steps are taken to protect the rights and welfare of human volunteers & patients participating in a research study/clinical trial.
- 2) To review all research projects involving human subjects to be conducted by medical faculty, social scientists, staff or students on scientific basis irrespective of the sponsor/funding agency.
- 3) To facilitate the investigators in getting the ethical approval of the proposals before the commencement of the study.
- 4) To monitor the research study/Project through appropriate well- documented procedures for example periodical reports, site visits and publications etc.
- 5) To evaluate proposals where indicated for exemption from IRB & Ethical Committee review ex. research that involves human subjects with no identifiable risks such as educational research, testing and survey procedures where no subjects identifying information will be recorded.
- 6) To identify protocols for expedited review in case of no more than MINIMAL risk.
- 7) To screen protocols for a full review in cases involving more than MINIMAL risk and for exemption if no identifiable risk.
- 8) The board will also examine compliance with confidentiality of research data and regulatory requirements as per NUMS policy/ Pakistani laws/ICH -GCP principles.
- 9) To constitute a data safety and monitoring board for protocols involving more than

reasonable risks and involving any safety concerns.

- 10) To safeguard rights of vulnerable subjects inclusive of autonomy and distributive justice in cases of soldiers, pregnant females, children and prisoners.
- 11) To identify and address potential conflicts of interest within IRB & Ethical Committee members, investigators, sponsors and monitors.

d) Composition of IRB & Ethical Committee

The IRB & Ethical Committee members shall be appointed by the Vice- Chancellor of NUMS and notified through the university order.

- 1) The board shall be composed of a chairperson and at least seven members or more to include both genders and at least one external member and one member from a non-scientific background from various disciplines for a minimum period of three years.
 - a) Any senior official (researcher/ academician) or a health professional with the equivalent background will be the chairperson unless there is a conflict of interest e.g. protocols where chairperson is co-opted as an investigator/co-Investigator, in which case a senior IRB& Ethical Committee member serves as stand-in IRB & Ethical Committee Chair. The IRB & Ethical Committee composition may vary depending on the expertise of members according to research project submitted.
 - b) One member from surgical and allied subjects.
 - c) One member from medical and allied subjects.
 - d) One member from basic sciences/ pathology/ pharmacology/ Microbiology.
 - e) One member who is a researcher from other university/ institute.
 - f) One member from non-scientific background /religious/ social worker.
 - g) One member from dentistry.
 - h) One member from Nursing.
 - i) Secretary IRB & Ethical Committee (Manager-ORIC) who is responsible for agenda, the conduct of the meeting, and finalizing the minutes and record maintenance.
 - j) One member from the general public.
 - k) One member as a legal expert.
- 2) Vice Chancellor can change the composition of IRB& Ethical Committee according to the availability/requirement of the university.
- 3) The board can also co-opt a maximum of two (2) members at any one time for independent expertise as and when required.
- 4) The composition of IRB& Ethical Committee members of NUMS will be notified as (IRB Form-1).
- 5) Dean Research and ORIC shall facilitate the ongoing professional development of IRB & Ethical Committee members through establishing minimal certification

requirements and via conduct of seminars and workshops.

- 6) IRB & Ethical Committee shall work autonomously and all protocols approved by IRB & Ethical Committee Chair shall bear the signatory seal/approval of the office of the Dean Research and ORIC.

e) Conduct of Meeting

The IRB & Ethical Committee Office has been established in the ORIC NUMS. Preferably, the IRB & Ethical Committee meeting shall be held monthly or as per requirement in the office.

- 1) The principal investigator shall send a request letter to IRB & Ethical Committee for ethical approval of research proposal as per (IRB Form-2). All the necessary documents must be completed & sent to secretary IRB & Ethical Committee by the principal investigator (minimum 4 hard copies and one soft copy) at least two weeks prior to proposed date of the meeting.
- 2) The principal investigator will make sure that the final version of the following document is enclosed for review: -
 - a) 4 X application for IRB application form (IRB Form 3).
 - b) 4 X Copies of the clinical trial protocol (and any amendments)
 - c) 4 X Copies of consent forms in English/ Urdu.
 - d) 4 X Copies of drug's/medical device's Brochure and up to date safety information.
 - e) Principle Investigator and Co-Principal investigators' CV stating their current position
 - f) A copy of the certificate of financial / non-financial conflict of interest.
 - g) A copy of the proposed 'material transfer agreement' if applicable, for collection and handling of any biological samples.
 - h) A copy of the declaration of results and confidentiality sharing with other allied institutions.
 - i) Any other documents if specially requested by the IRB & Ethical Committee.
- 3) After reviewing the above document, the secretary will issue a letter with an agenda to all members of the board. The letter will also give details about the date of the meeting, venue and list of members who will attend the meeting. A Copy of letter will be retained in the investigator's study file and IRB & Ethical Committee folder
- 4) The Chairperson will preside all meetings of the IRB & Ethical Committee. If for reasons beyond control, the Chairperson is not available, the nominated deputy Chair will preside over the meeting.
- 5) The secretary is responsible for organizing the meetings, maintaining the records and communicating with all concerned. He/she will prepare the minutes of the meetings (IRB & EC Form 4) and get it approved by the Chairman before communicating with the researchers.
- 6) A quorum of 50% of members must be present at a meeting before its decision can be considered valid.

- 7) Only those members who will participate in the IRB& Ethical Committee review & discussion can cast vote/give their opinion and/or advice.
- 8) In special circumstances, IRB & Ethical Committee can invite non- members with expertise for assistance and opinion but they will not vote for the approval or disapproval. They will just help the Institutional Review Board& Ethical Committee to reach a final decision.
- 9) No subject will be enrolled in any study/clinical trial before the IRB& Ethical Committee issues its written approval of the trial. All the enrolled subjects will have the right to withdraw from the study at any time without giving any reason.
- 10) A document describing the safeguarding measures will be in place to protect the data e.g. locked cabinets, encryption of data, linking information stored in a different location from other data and access limited to only concern research staff.

f) Guidelines for Drafting an Informed Consent Form

Informed consent will be sought from each subject or the subject's legally authorized representative (An adult next of kin: Father, mother, spouse, brother, sister, children); informed consent will be appropriately documented (IRB& EC Form 5), guidelines are given here in order to help and facilitate the researchers in drafting a proper consent form. It is required for researchers to provide informed consent form as well as any instructions for potential research subjects as applicable and any related advertisement for the study, which can serve as a means to provide information about the study.

- 1) All studies involving human subjects should have a properly drafted consent form. It should be done at an appropriate time, sufficiently before the start of the study.
- 2) Consent may be written or verbal. In the case of unwritten consent, it should be signed by the person taking the consent and witnessed by a second person. Every effort must be made to obtain subsequent written consent when feasible
- 3) In case of children, mentally or physically incapacitated subject, consent should be obtained from an immediate relative such as wife or husband, father or mother, brother or sister etc.
- 4) The consent form should be in English and/or Urdu language as needed. Use of technical terms should be avoided.
- 5) It should be written in “second or third person” and not in “first person”. For example, “You will be asked to give 10 cc blood” or “you will be asked few questions” etc.
- 6) A properly drafted consent form should contain the following important points.
 - a) Information sheet. There should be one paragraph about the nature of study, its purpose and procedures to be carried out on the study subjects.
 - b) Possible risks and benefits to the study subjects and any alternatives with its attendant risks/benefits.
 - c) Voluntary participation without any compulsion or undue financial incentive
 - d) Right to withdraw from the study at any time without affecting treatment
 - e) Right to confidentiality.
 - f) Name and contact number of the investigator in case the study subject wants

- g) further clarification or information about study
 - g) Authorization from study subjects with their signature, thumb impression, signature of witness etc.
 - h) Anticipated duration of the study.
 - i) In case of injury whether any form of compensation is to be expected inclusive of immediate medical care.
- g) **NB:** The ICH - GCP recommends 20 elements of an informed consent of which 8 are considered essential

1) EIGHT ESSENTIAL ELEMENTS OF INFORMED CONSENT AS PER ICH-GCP GUIDELINES

- a) A statement that the study involves research, an explanation of the purpose of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental.
- b) A qualitative description of any reasonably foreseeable risks or discomforts to the subject.
- c) A description of any benefits to the subject or to others, which, may reasonably be expected from the research.
- d) A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject.
- e) A Statement describing the extent, if any, to which confidentiality of record identifying the subject will be maintained.
- f) For research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatment are available if injury occurs and, if so, what they consist of, or where further information may be obtained.
- g) An explanation of whom to contact for answers to pertinent questions about the research subjects' 'rights, and whom to contact in the event of a research-related injury to the subject.
- h) A statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss benefits to which to which the subject is otherwise entitled.

2) SIX ADDITIONAL ELEMENTS OF INFORMED CONSENT

- a) A Statement that the particular treatment or procedure may involve risk to the subject (or to the embryo or fetus, if the subject is or may become pregnant) which are currently unforeseeable.
- b) Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent.
- c) Any additional costs to the subject that may result from participation in the research.

- d) The consequences of a subject's decision to withdraw from the research and procedure for orderly termination of participation by the subject.
- e) A statement that significant new findings developed during the course of the research which may relate to the subject's willingness to continue participation will be provided to the subject.
- f) The approximate number of subjects involved in the study.

Additionally: A statement to inform the potential clinical trial participant that information about applicable trials has been, or will be, entered into a databank that is public accessible ex

<http://www.ClinicalTrials.gov>

h) IRB & Ethical Committee Minutes and record keeping

Minutes of IRB& Ethical Committee meetings include (IRB & EC Form 4):

- 1) A list of attendees at the meeting
- 2) Actions taken by the IRB& Ethical Committee.
- 3) The vote on these actions, including the number of members voting for, against, and abstaining
- 4) The basis for requiring changes in or disapproving research
- 5) A written summary of the discussion of controversial issues and their resolution

(a) Criteria for IRB & Ethical Committee approval of research:

- (1) Risks to subjects are minimized by using procedures which are consistent with sound research design and do not unnecessarily expose subjects to risks, and whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.
- (2) Risks to subjects are acceptable in relation to anticipated benefits, if any, to the subjects and the importance of the knowledge that may reasonably be expected to result. In evaluating risks and benefits, the IRB& Ethical Committee should consider only those risks and benefits that may result from the research.
- (3) Selection of subjects is equitable; in making the assessment the IRB& Ethical Committee should take into account, the purposes of the research and the setting in which the research will be conducted and should be particularly cognizant of the special problems of research involving vulnerable populations.
- (4) The research plan makes adequate provision for monitoring the data collected to ensure subject safety.
- (5) There are adequate provisions to protect the privacy of the subjects and confidentiality of data.
- (6) When some or all of the subjects are likely to be vulnerable to coercion or undue influence, additional safeguards are included to protect the rights and welfare of these subjects.

- (7) All criteria for approval must be satisfactorily met during IRB& Ethical Committee review before human subjects research may be approved by the IRB& Ethical Committee.

(b) Communicating the decision

After reviewing the above document in the meeting, the chairperson will issue a letter of approval letter (IRB& EC Form 6)/ favorable opinion, or disapproval with reasons. This letter will be given to the principal investigator, preferably within a week time of the meeting and retained in IRB& Ethical Committee folder.

(c) Continuing Review

The IRB& Ethical Committee must conduct a continuing review of ongoing approved research at intervals appropriate to the degree of risk, but not less than once a year. The investigator will report to IRB& Ethical Committee in case of: -

- (1) Deviation from, or changes of, the protocol to eliminate immediate hazards to the trial subjects.
- (2) Changes increasing the risk to subjects and / or affecting significantly the conduct of the trial.
- (3) All adverse drug reactions that are both serious and unexpected.
- (4) Any adverse events during enrollment in the trial whether or not temporally related to drugs
- (5) New information that may affect adversely the safety of the subject or the conduct of the trial.
- (6) Completion or termination of the study.
- (7) Study progress on annual basis

i) IRB & Ethical Committee Record Keeping

- 1) The IRB& Ethical Committee prepares and maintains adequate documentation of IRB & Ethical Committee activities, including the following.
- 2) Copies of all research proposals reviewed along with scientific evaluations, if any, approved sample of consent documents, progress reports submitted by investigators and reports of injuries to subjects.
- 3) Minutes of IRB& Ethical Committee meetings.
- 4) Record of continuing review activities.
- 5) Copies of all correspondence between the IRB& Ethical Committee and the investigators.
- 6) A list of IRB& Ethical Committee members, along with a copy of their qualifications and experience in the form of Curriculum Vitae.
- 7) Written procedures for the IRB& Ethical Committee
- 8) A copy of documents describing the safeguarding measures that will be in place to protect the data e.g., locked cabinets, encryption of data, linking information stored in a different location from other data and access limited to only concerned research staff.
- 9) In case direct involvement of human subjects is not required, e.g.
 - a) Bio banking where all data has been de-identified

- b) Case reports or chart review with de-identification of subject's identity an exemption must be sought from IRB& Ethical Committee (IRB& EC Form 7).
- 10) The secretary IRB & Ethical Committee will be responsible for monitoring/maintain all relevant record (e.g. written procedures, membership lists, submitted documents, minutes of meeting & correspondence) for a period of at least 3 years after the completion of the study and make them available upon request from the regulatory authority. All minutes of IRB & EC proceedings shall also be saved in electronic form for a minimum of ten years.
- 11) In case of posting or change of any member/staff, there will be proper handing/ taking over of record /updates of the previous and ongoing studies / trials.

j) Publications

- a) At the end of the research study or clinical trial, final results / data will be shared with IRB & Ethical Committee. The IRB & Ethical Committee shall request a progress report on every approved project annually w.e.f. date of approval.
- b) Final write up of article will also be shared with IRB & Ethical Committee before submitting to any journal for publication. The principle investigator is responsible to provide a copy of author's approval form duly signed by all of them that everyone has been given appropriate credit in the paper and that ICMJE criteria for authorship have been followed.
- k) The Chairperson will be kept informed about all the updates of the study and amendments through correspondence with ORIC NUMS.
- l) Each member of IRB& Ethical Committee may serve for maximum 3 years, which may be renewed, once.

2. NUMS Plagiarism Policy

a. Introduction:

- 1) Originality, genuineness and integrity are the fundamental principles of research work. NUMS out rightly condemns plagiarism and always endeavors to discourage and combat plagiarism in academic and research domains. Keeping in view the guidelines, instructions and policies of the Higher Education Commission, NUMS has been making all efforts to enlighten its faculty and students to avoid infringements of intellectual originality of their academic and research efforts. NUMS unconditionally rejects intellectual dishonesty in its all forms and manifestations.
- 2) Based upon its strong determination to foreclose all possibilities of the commission of any plagiarism-related offence, NUMS has developed this plagiarism policy (which is primarily embedded in anti-plagiarism outlook) for strict compliance with immediate effect. The principal purpose being to ensure that ethical and academic standards of intellectual integrity are met at NUMS in their entirety (HEC plagiarism policy is available on their official website).

b. Aim:

This policy aims to inform NUMS students, teachers, researchers, and staff about plagiarism and enable them to avoid it under all circumstances. It also aims to prevent plagiarism by authorizing and regulating preventive and punitive actions against those found guilty of being deliberately involved in it.

c. Applicability:

- a) All enrolled students as well as those who have graduated, faculty members, researchers, staff of the university including its constituent and affiliated colleges and institutes as well as its teaching hospitals.
- b) Any person listing his/her CV on the NUMS website containing any current publication or applying for any benefit on the basis of published or presented work that is plagiarized will be liable to be penalized as per prescribed rules.

d. Definition of Plagiarism:

Plagiarism may take place in many forms including but not limited to the following:

- 1) Wholly or partly reproducing someone else's past work with or under one's own name.
- 2) Paraphrasing a source and material exactly from books under one's own name.
- 3) Making a mash-up, mixture or fusion of sources of already published work and publishing under one's own name.
- 4) Word-for-word or word-by-word copying portions of another author's research work or from reports by citing but not clearly differentiating what text has been copied (e.g. not applying quotation marks correctly) and /or not citing the source correctly.
- 5) The re-use of significant, identical, or nearly identical portions of one's own work without acknowledging that one is doing so or without citing the original work.

e. HEC's Definition:

HEC has quoted the definition of plagiarism from the Concise Oxford Dictionary, namely "taking and using the thoughts, writings, and inventions of another person as one's own". HEC has, however emphasized that there is a variety of forms in which plagiarism manifests. These usually include but are not limited to the following:

- 1) Verbatim copying, near-verbatim copying, or purposely paraphrasing portions of another author's paper or unpublished report without citing the exact reference.
- 2) Copying elements of another author's paper, such as equations or illustrations that are not common knowledge, or copying or purposely paraphrasing sentences without citing the source.
- 3) Verbatim copying portions of another author's paper or from reports by citing but not clearly differentiating what text has been copied (e.g. not applying quotation marks correctly) and /or not citing the source correctly.
- 4) The unacknowledged use of computer programs, mathematical/computer models/algorithms, computer software in all forms, macros, spreadsheets, web pages, databases, mathematical derivations and calculations, designs /models / displays of any sort, diagrams, graphs, tables, drawings, works of art of any sort, fine art pieces or artifacts, digital images, computer-aided design drawings, GIS

files, photographs, maps, music / composition of any sort, posters, presentations and tracing.

- 5) Self-plagiarism, that is, the verbatim or near-verbatim re-use of significant portions of one's own copyrighted work without citing the original source.

f. Responsibility of the Colleges/Institutes of NUMS:

- 1) All colleges and institutes of NUMS to whom this policy applies, are responsible to ensure that their students, teachers, researchers and staff members are aware of the definition of plagiarism, its implications and penalties for committing plagiarism-related contraventions/violations.
- 2) These colleges and institutes should invariably educate their staff and students regarding research ethics. NUMS will host workshops on research ethics and plagiarism to raise awareness among all its colleges and institutes on regular basis. Still the ultimate responsibility of ensuring that all papers/articles/reports/manuscripts/theses/synopses/patents/abstract/books submitted for publication attain the highest ethical standards lies with the authors including the coauthors and supervisors.
- 3) The student's supervisors in these colleges and institutes shall be responsible and accountable for the originality and integrity of the synopses/theses/research papers of their students. They must, therefore, ensure that any work submitted by their students is clear of plagiarism before submission to NUMS-ORIC.
- 4) In case any complaint is launched in any college or institute or if any thesis/report/paper submitted to NUMS-ORIC has a similarity index > 19 or there is a similarity index of $\geq 5\%$ from a single source without citation then allegation report (Refer: "Guidelines on 'Ethics of Using Turnitin for Instructors'" will be generated by NUMS ORIC which will be processed in PSC as per rules and procedure mentioned in this policy.
- 5) As a general rule an anonymous complaint is not to be entertained. However, if overwhelming evidence of plagiarism is found, even anonymous complaints will be considered to be dealt with as per plagiarism policy with the approval of the Competent Authority. (Refer "Time bound SoPs" for Plagiarism cases.
- 6) The case pertaining to the period before the announcement of HEC Plagiarism Policy on 27 September, 2007 will be investigated/evaluated for plagiarism 'only' if the accused has drawn some benefit on the basis of the plagiarized work, because academic dishonesty has never been acceptable at any point in time. However, if the accused claims that he/she has not drawn any benefit of the plagiarized work, following actions are to be taken:
 - a) The authors will withdraw the research paper from the journal and remove its mention from their resume
 - b) The corresponding author(s) will send letter of apology to the publisher
 - c) The authors will submit affidavits on stamp papers stating that neither they have claimed any credit for the plagiarized work nor will they claim any credit in future. (Reference: HEC letter DD-QA/HEC/2015/153 dated September 5, 2017

g. Launching of complaint:

A complaint of plagiarism should be launched in writing to the NUMS ORIC with the following details:

- 1) A complete citation of the original idea/paper/patent etc., which is alleged to have been plagiarized.
- 2) Citation of the alleged plagiarized paper.
- 3) Copies of both papers/documents mentioned above.
- 4) Any other related information which can establish a case for plagiarism.
- 5) Name, designation, organization, address, email and contact number of complainant along with attested copy of the CNIC.
- 6) Name, designation, organization, address, email and contact number of the accused.

h. Investigation:

- 1) Upon receipt of a complaint containing an allegation of plagiarism, the NUMS ORIC will immediately carry out a discrete investigation through the Plagiarism Standing Committee (PSC) according to the guidelines of HEC.
- 2) The PSC will determine the authenticity of the allegation, consult experts, provide the accused author(s) a chance to clarify or justify their position and, if required, to the complainant as well as the author(s) whose paper is deemed to have been plagiarized. During the investigation process, the members will not disclose any details of the investigation until the Committee reaches its final conclusion.
- 3) On completion of investigation, not later than sixty days of the receipt of complaint, the PSC will present its comprehensive report to the Vice Chancellor.
- 4) The final decision which may contain appropriate preventive or punitive actions will be made by the Vice Chancellor after affording opportunity of hearing to the concerned person or persons as and if deemed necessary.
- 5) The final outcome of the case shall be intimated to HEC as per procedure in vogue.
- 6) All investigation proceedings, their outcome and consequential actions shall be treated “confidential” and kept away from the access of persons not authorized or concerned with implementation of plagiarism policy.

i. Composition of NUMS Plagiarism Standing Committee:

The Vice Chancellor has constituted the NUMS Plagiarism Standing Committee under the chair of Pro Vice Chancellor Academics along with internal/external member and 1 x nominee of HEC.

j. Penalties for Plagiarism:

- 1) For faculty members, staff and researchers, plagiarism is a very serious offense and is punishable by sanctions ranging from letter of warning to termination/dismissal from service.
- 2) Students are also expected and required to do their own original work on each assignment and research work. A student who recycles his/her course/research work from one class/project to another may face an allegation of academic/research dishonesty. An instructor who believes that a student has committed an act of plagiarism should take immediate appropriate action, including the issuing of a “penalty grade” for academic dishonesty.

- 3) When plagiarism allegation has been proven in any investigated case, the PSC is required to recommend to the Vice-Chancellor to take necessary penal action depending on the nature and gravity of the offense against the faculty/staff/student.
- 4) Keeping the above in view, the penalties for plagiarism have been divided into two separate categories, i.e. those for 'Faculty Members, Researchers and Staff' and those for the 'Students' as per table given below.

k. Table of Penalties

1) For Teachers, Researchers and Staff:

S#	Penalty	Nature/Extent of Offence	Penal Action
1	Major Penalty	Plagiarism has been proven to be > 60%) of the content (or key results) have been exactly copied from any published work of other people without giving/quoting reference of the original work.	a) dismissal/termination from service OR b) Ineligibility for employment in academic/ research organization at NUMS for any cadre. c) Blacklisting on HEC & NUMS websites (if approved by VC)
2	Moderate Penalty	Plagiarism has been proven to be 35-60% of the content including some key results have been copied without citation.	a) Demotion to next lower grade OR b) Stoppage of promotion or annual increment(s) in time scale or otherwise c) Freezing of research/ travel grant(s) in time scale or otherwise d) Permanent or time-specific disqualification for supervision of PhD/MS/MPhil/Equivalent students
3	Minor Penalty	Plagiarism has been proven to be 20-35% of the content without giving reference of the original work.	Anyone or a combination of following: a) Warning letter b) Freezing of research/travel grant (s) in time scale or otherwise c) Stoppage of promotion/ annual increment(s) in time scale or otherwise d) Permanent or time-specific disqualification for supervision of PhD/ MS/ MPhil/ Equivalent students

2) For Students:

S#	Category	Characteristic	Action
1	Thesis	Complete or partial plagiarism in any case	<p>For Moderate and Minor plagiarism: Anyone or a combination of following:</p> <p>a) The offender may be expelled /rusticated or relegated to lower class and notified to all concerned</p> <p>b) Failure in the relevant discipline/subject</p> <p>c) Imposition of fine as deemed appropriate</p> <p>d) Written warning (in case of minor offense)</p> <p>e) Specific or general debarring from scholarship, travel grants, fellowship or any other funded project as deemed appropriate.</p> <p>For Major Plagiarism:</p> <p>a) Withdrawal of degree/certificate in case of major plagiarism in the thesis</p> <p>b) In case plagiarism in thesis is found, the role of the supervisor in the commission of the offence will be investigated for fair determination of his/ her responsibility.</p>
2	Publication		
3	Any content/published (online or in print) under NUMS		

l. Additional Actions:

In addition to the above penalties, the following additional common actions may also be taken in situations where the offense of plagiarism stands proved and established:

- 1) If the plagiarized paper is accessible on the web, its access should be removed. The paper itself will be kept in the database for future legal purposes.
- 2) The author(s) will be asked to write a formal letter of apology to the authors of the original paper/ work that was plagiarized, including an admission of plagiarism. In case of refusal, harsher penalty may be inflicted by the Vice Chancellor as deemed appropriate.
- 3) If the paper is submitted but not published, the chief editor/editor of the journal shall be informed for the paper to be retracted at once.

m. Responsibilities of the Principal Author:

- 1) The principal author shall, in addition to his/ her other responsibilities along with the co-authors, follow and observe all ethical responsibilities of research and authorship.
- 2) He/she will be responsible for the originality and genuineness of the contents of his/her articles, writings, compositions and other similar products. He/she shall not make any false claims for anything which is not a result of his/her own work or efforts.
- 3) While submitting his/ her manuscript to ORIC, he/ she shall furnish a personal certificate with his/her own and co-authors' signatures, about the originality and genuineness of the contents and every such certificate shall be countersigned by the Head of the Department (HoD) and in his/her absence by the Dean concerned.
- 4) The principal author should give authorship to others only if they have made significant contribution. He shall be responsible for ensuring that all co-authors have played their role in the manuscript preparation and have consensus on the order of authorship.

n. Responsibility of Co-Authors:

- 1) All co-authors will be deemed and treated to be equally responsible for any plagiarism committed in a published paper in any journal or presented at a conference.
- 2) The co-authors will be liable to the same penal actions as are applicable to the principal author.

o. General Responsibilities of Authors:

- 1) References to all sort of data and reported researches must be given. It is authors' duty to submit original work and give due credit to others' work. Material quoted verbatim must be given in quotation marks.
- 2) The author can publish the work which was previously published only in abstract form. He/she can republish previously published research work if it is significantly different from the previous research due to value addition on account of more data.
- 3) Authors must acknowledge all persons, institutions or organizations who have helped in the research work or research process.

p. Responsibility on the Supervisor of a Plagiarized PhD/MS/MPhil/Equivalent Program Thesis:

If the plagiarism is established in the thesis of a PhD/MS/MPhil scholar, then the supervisor shall also be held responsible for this act and black listed for 05 years and the information will be uploaded on the NUMS and HEC websites. Besides, a disciplinary action shall also be initiated against such supervisor. (Refer HEC letter No. 1-22 (NQAC)/QAD/2017/HEC/07-364 dated March 24, 2017

q. Black Listing of Complaints of False Allegation by NUMS/HEC:

The complainant of false allegation of plagiarism shall be blacklisted for the 05 years and the information will be uploaded on the NUMS and HEC websites. (Refer HEC letter No. 1-22 (NQAC)/QAD/2017/HEC/08-365 dated March 24, 2017.

r. Appeal against penalties:

The affected person(s) will have the right to appeal to the Vice Chancellor / Chairman HEC for a review of the findings or may submit a mercy petition within 30 days from the date of issuance of the impugned decision. All such appeals and petitions will be processed and finalized according to HEC guidelines.

s. Anti-Plagiarism Measures:

- 1) IT Readiness: use of Turnitin shall be considered and made mandatory before submitting material for publication.
- 2) Awareness of research and academic ethics shall be promoted on regular basis as an essential institutional management feature.
- 3) Dissemination of plagiarism policy among students and faculty shall be conducted as a regular feature of the overall academic and research policy.

t. Over-rider:

- 1) In case of any discrepancy between this policy and the policies/guidelines/instructions of HEC on any aspect of plagiarism, the latter shall prevail.
- 2) This policy will be reviewed every three years and revised & updated if required.

Recommended Reading: “The Little Book of Plagiarism” produced by Leeds Metropolitan University

<https://www.hec.gov.pk/english/services/faculty/Documents/Plagiarism/Little%20Book%20of%20Plagiarism.pdf>

3. NUMS Intellectual Property Rights (IPRs) Policy

a. Introduction.

In this postmodern globalized world when the speed and quantum of ultra-advance scientific research and discovery/innovation are fast impacting the socio-economic patterns and standards of human life, the importance of proprietary rights, whether corporeal or incorporeal, of man’s ingenuity and creativity, has increased multifold. The significance of intellectual property rights has been recognized and consented to being enforced at national and international levels under the World Trade Organization’s arrangements. As one of the active members of WTO, Pakistan has thoroughly revamped, modernized, and expanded its intellectual property laws regarding global standards and international commitments. Pakistan has also established an Intellectual Property Organization (IPO) to watchfully regulate the compliance, implementation and enforcement of these laws relating to patents, copyrights, designs, trademarks and other intellectual property rights. While the provisions relating to infringement of trade, property and other marks are given in the Pakistan Penal Code, 1860, the primary IPRs-related laws of Pakistan include:

- 1) The Intellectual Property Organization of Pakistan Act, 2012 read with the Convention Establishing the World Intellectual Property Organization, 1967 (WIPO).
- 2) The Copyright Ordinance, 1962, Copyright Rules, 1967, International Copyright Order, 1968 and Copyright Board (Procedure) Regulations, 1981.

- 3) The Registered Designs Ordinance, 2000 and Registered Layout-Designs of Integrated Circuits Ordinance, 2000.
- 4) The Trade Marks Ordinance, 2001 and Trade Marks Rules, 2004.
- 5) The Patents Ordinance, 2000 and Patents Rules, 2003.
- 6) The Merchandise Marks Act, 1889.
- 7) The Press, Newspapers, News Agencies and Books Registration Ordinance, 2002 and rules made thereunder in 2009.
- 8) The Federal Supervision of Curricula, Text-Books and Maintenance of Standards of Education Act, 1976.
- 9) The Electronic Transactions Ordinance, 2002.
- 10) The Competition Act, 2010.

b. Main Definitions:

For the understanding or interpretation of this policy, the following definitions shall be used as and when needed.

- 1) “Confidential information” is the information which is not known to the public or is in the public domain, but is private to the company or individual who possesses such confidential information.
- 2) “Copyright” applies to literary and dramatic works, artistic and musical works, audio and video recordings, broadcasts and cable transmissions. Copyright is also the usual way of protecting software, although some software may be patented if it is a functional part of an invention. Copyright lasts 50 years after the death of the author.
- 3) “Design Right” applies to aspects of the shape or configuration of an article. Unregistered design right (computer chips etc) can protect internal or external features. In the case of registered designs, the features must appeal to and be judged by the eye.
- 4) “Database Right” applies to databases which are not protected by copyright.
- 5) “Incidental Invention” is an invention (other than a supported invention) that is conceived or reduced to practice by a person covered by this policy making an incidental use of space, facilities, materials or other resources related to the conception or reduction to practice of such Invention.
- 6) “Innovator” is a person who introduces new methods, concepts, ideas or products.
- 7) “Intellectual Property (IP)” refers to ideas, information and knowledge that can be protected and commercialized (used to generate revenue). This includes, inter alia, inventions, literary and artistic work, symbols, names, images, design, know-how and confidential information as the results and outcomes of research.
- 8) “Intellectual Property Rights (IPR)” are specific legal rights which protect the owners of IP.

- 9) “Inventor” is a person who individually or jointly with others makes an invention.
- 10) “Invention” is any patentable or potentially patentable idea, discovery or know-how and any associated or supporting technology that is required for development or application of the idea, discovery or know-how.

c. Interpretation:

As generally understood or construed, invention shall mean any useful and patentable process, output, machine, manufacture, or composition of matter or any improvement to one of those, created through independent effort and characterized by an extraordinary degree of skill or ingenuity. Invention is also defined as a new scientific or technical idea, and the means of its embodiment or accomplishment. However,

- 1) to be patentable, an invention must be novel, have utility, and be non-obvious;
- 2) to be called an invention, an idea only needs to be proven as workable;
- 3) but to be called an innovation, it must also be replicable at an economical cost, and must satisfy a specific need.

That’s why only a few inventions lead to innovations because not all of them are economically feasible.

- 1) “Know-How” is unpatented technical information (including information relating to inventions, discoveries, concepts, methodologies, models, research, development and testing procedures, the results of experiments, tests and trials, manufacturing processes, techniques and specifications, quality control data, analyses, reports and submissions) that is not in the public domain.
- 2) “Patent” grants a legal monopoly lasting 20 years granted in exchange for describing an invention. Patent registration usually involves payment of certain fee to the government. A patent position is destroyed by public disclosure of the idea before a patent application is filed.
- 3) “Supported invention” in the context of this policy, is an invention conceived or reduced to practice by a covered person (whether alone or together with others) if conceived or reduced to practice in whole or in part:
 - a) Under or subject to an agreement between NUMS and a third party; or
 - b) With use of direct or indirect financial support from NUMS, including support or funding from any outside source awarded to or otherwise administered by NUMS; or
 - c) With use (other than incidental use) of space, facilities, materials or other resources provided by or through the university.
 - (1) “Trademark” is a mark (logo) or other distinctive sign applied to or associated with products or services, which does not describe the products or services.
 - (2) “Trade Secret” is any confidential business information which provides an enterprise a competitive edge. Trade secrets encompass manufacturing or industrial secrets and commercial secrets.

- (3) “Tangible Research Property/Unpatented Materials” includes biological materials such as cell lines, plasmids organisms, hybridomas, transgenic animals, proteins, plasmids, DNA/RNA, chemical compounds, monoclonal antibodies, plant varieties and other materials useful for research or for commercial purposes; computer software, data bases, integrated circuit chips, prototype devices and equipment, circuit diagrams; analytical procedures and laboratory methods, whether or not intellectual property protection is available through patents and/or copyright or otherwise.

d. NUMS’ IPRs’ Coverage:

NUMS as a higher education institution of medical and allied sciences is committed to serve the Pakistani nation and humanity at large through academic teaching and scientific research in all the relevant fields. Since research in medical, biological and related regimes is one of the prime activities of NUMS, the question of intellectual property rights has attained tremendous practical importance in NUMS’ overall as well as day to day academic and research programs and activities. So as matter of declared institutional policy, NUMS encourages the development and commercialization intellectual property (IP) created, invented, and developed by the full or part time faculty, technical and scientific research personnel/staff and students and such other persons whose research work is funded or otherwise supported by NUMS either solely or in collaboration with external quarters/sources.

- 1) **Aim:** to provide a framework for the identification, protection and manipulation for the potentially valuable research results and profitable scholastic and creative work involving or leading to successful technology transfer, to identify possible routes to provide financial incentives to individuals and institutions/organizations interested in finding out dependable opportunities for making innovations and their commercialization.
- 2) **Policy Implementation:** ORIC will be the hub of NUMS IPRs’ policy implementation. All guidance, advice, clarifications, explanations, confirmations, training, management, negotiations, finalization of agreements, intermediations, settlements, interest/share range determinations, monitoring, supervision and control in respect of activities related to NUMS’ IPRs’ domain shall flow from and converge to ORIC.
- 3) **Scope:** NUMS IPRs will cover all innovative research activities performed by “covered persons” as described in Para ‘04’ of the policy.

e. “Covered Persons” Defined:

In the context of this policy, “covered person” means a person whether in the employment of NUMS or not, who can avail benefits or privileges of this policy under an agreed arrangement with NUMS on account of commercialization of any legitimate innovation involving intangible/incorporeal right or rights of such person. For the purpose of convenience, the main categories of covered persons are listed below:

- 1) All full time faculty and visiting faculty of NUMS.

- 2) All full time technical staff or administrative staff of NUMS engaged or involved in such work as may either intentionally or incidentally culminate in any innovation(s).
- 3) Students of NUMS including research fellows and post-doctoral fellows.
- 4) Non-employees of NUMS fully or partially using university resources for research in an approved or agreed manner.
- 5) Any person from trade and industry who has not used the university resources for the research conducted by him but desires to collaborate with NUMS for the commercialization of his innovation.
- 6) Any person nominated or designated as covered person by the Vice Chancellor.

f. Intellectual Property Rights Explained.

Intellectual property rights are rights associated with creating the human mind. It is a particular category of intangible rights protecting commercially valuable products of human intellect. As defined in the Intellectual Property Organization of Pakistan Act, 2012, intellectual property includes trademarks, patents, industrial designs, layout designs (topographies) of integrated circuits, copyright and related rights and all other ancillary rights. Intellectual property is like any other property, and the law allows the owner to use it commercially to benefit from intellectual work. IPRs cover a range of literary, artistic and scientific works, inventions in all fields of human endeavour, scientific discoveries, industrial creations, commercial names and designations, protections against unfair competition and any other rights resulting from intellectual efforts. The establishment of the World Intellectual Property Organization (WIPO) has perpetuated and solidified the significance of IPRs for the economic growth of nations in the knowledge economy. Intellectual property is usually classified into complex IP and soft IP. Complex IP is intellectual property such as a patent. Burdensome intellectual property is a property such as a patent that excludes others from using the invention without the holder's consent, even if others find the innovation independently. Soft intellectual property means such property, like copyright, that does not preclude independent creation by a third party.

g. Intellectual Property and Commercialization Review Committee (IP&C): -

NUMS' Intellectual Property and Commercialization (IP&C) Review Committee will be comprised of Chairperson and six members as stated below:

- 1) Pro-VC Academics Chairperson
- 2) Dean of Respective Faculty Member
- 3) Director Research Member
- 4) Director (Legal Affairs) Member
- 5) Director (ORIC) Member
- 6) Assistant Director ORIC (RS) Member & Secretary
- 7) Legal Advisor ORIC (IP) Member
- 8) Co-Opted Member for a specific field

h. Function of IP&C:

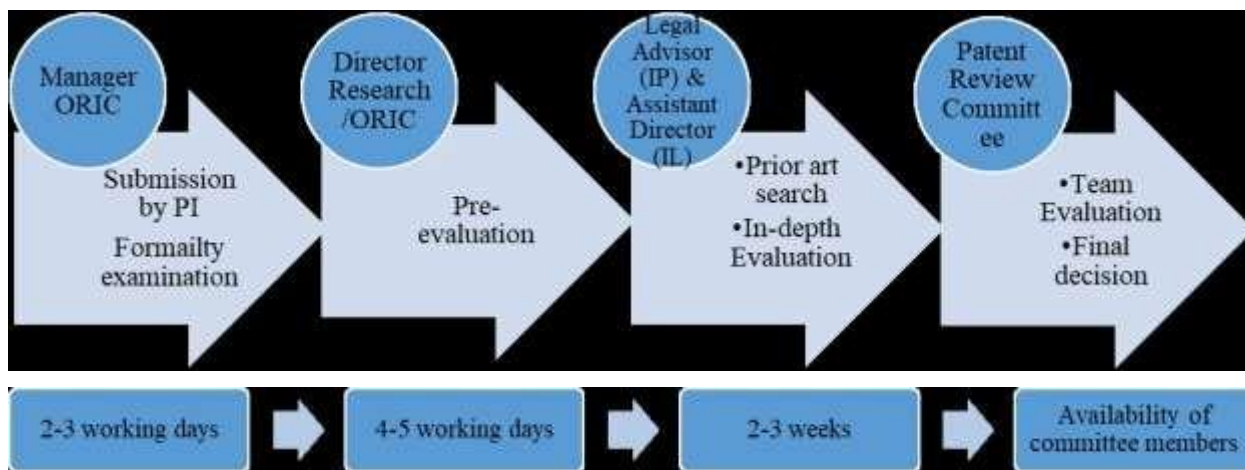
ORIC will be responsible for formality examination while in-depth scrutiny for patentability will be carried out by the Legal Advisor (IP), and commercialization potential will be provided by the inventor of submitted IP disclosures and, if required, will be evaluated by the experts using the scoring matrix designed for the purpose. The committee may call or ask for additional information or a personal interview if needed. The Intellectual Property Disclosure Form can be sent to the subject expert(s) if a specialized review of some technological aspects is required. Based on the scoring matrix of submitted disclosures, the members will vote for and against any patent and/or commercialization plan. The chairperson will use their right to vote if voting members have equal distribution.

i. Ownership of IP:

- 1) Intellectual property rights (IPR) of technology, material, tangible research, scholarly work, publication and/or software produced by persons covered by this policy will be owned by NUMS in case where the intellectual property was:
 - a) Generated as an outcome of sponsored research agreement with NUMS.
 - b) Involved or involves use of funds, facilities or resources etc belonging to NUMS.
 - c) Developed in part or as a whole by faculty, administrative/technical staff and/or students of NUMS individually or in a group.
- 2) NUMS shall own all rights in tangible research property and unpatented materials and may conditionally or otherwise, make distribution in the public interest, including licensing or transferring unpatented materials, for such research or commercial purposes as may be specified.
- 3) For the removal of any doubt, it is emphasized that the ownership of all academic activities or academic performance data including admission, examination, assessment and results data gathered/compiled by or otherwise accumulated in the university shall, vest with NUMS. No such data shall be used by any person for any direct or indirect analysis, research or publication purposes except with prior permission from NUMS and compliance to the conditions as may be specified or imposed by NUMS in this behalf.

j. IP Process Flow and Use of Standardized Forms:

Whenever an IP is developed by a person covered by this policy using NUMS resources, they will notify in writing on the prescribed form in duplicate through ORIC. The inventor will also submit a soft copy and Excel sheet to ORIC. The application form will be scrutinized as described in the flowchart below.



k. Internal mechanism for scrutiny of IP disclosure

The decision of the NUMS IP&C Review Committee for submission of application to IPO, Pakistan and/or USPTO will be communicated to the inventor within 4-6 weeks of finalization thereof. The inventor will provide complete prescribed application forms for IPO-Pakistan and HEC (to best of his/her expertise) to the ORIC team within 2-3 working days after receiving intimation about Committee's decision. The ORIC team will extend necessary advice, help or assistance in the filling of forms prescribed in this policy, as may be requested.

l. Standardized Forms for Scrutiny of IP Disclosure

In order to streamline the NUMS work relating to handling and treatment of IPR matters, the following standard forms are specified and annexed with this policy.

- 1) **Intellectual Property Biodata Form:** -Through this form, the inventors are required to provide information as to their employment, funding sources for invention, any agreement or third party agreement that may affect ownership/rights or commercialization over the IP. This form also requires to identify all inventors so that any dispute over inventorship can be settled prior to filing of application for IPR. Where students are involved in the creation of any IP, they will also assign their rights in the IP to NUMS in return for admission to the revenue sharing as per policy. The necessary information to assess commercial potential, proposed investors and potential of technology transfer will be submitted to allow NUMS take timely decision. The inventors shall invariably keep NUMS informed of their contact details as throughout the patenting and commercialization process for official interaction if required.
- 2) **Intellectual Property Disclosure Form:** - On this form, the inventors are required to provide complete information regarding their invention under their full signatures. The form also requires signatures from the relevant Director as an indication that the Director knows the factum about the IP application filing and decision of the IP&C shall also be conveyed to the Director in due course. This form will in fact enable NUMS to gather information required to make a decision on whether or not to file a provisional or utility application in respect of any particular item of IP.

- 3) **Invention disclosure- Scoring Matrix:** - These two forms will allow the IP&C Review Committee to systematically gather the information required to make a decision on whether or not to file a provisional or utility application to IPO-Pakistan and/or USPTO through HEC.
- 4) **Declaration of inventorship:** - The inventor will submit a declaration stating who the inventors are in order to avoid later disputes over inventorship.
- 5) **Assignment of IPRs, Revenue Sharing and Commercialization Rights to NUMS:** - Through this form, the covered persons are asked to sign a confirmatory assignment of IP to NUMS thereby allowing the inventor(s) to agree that revenue will be shared in accordance with this policy or under any other arrangements as may be conceded to by NUMS. The covered person shall also have to certify that NUMS is free to commercialize the IP. Where students have been involved in the creation of IP, they will also be required to assign their IP to NUMS in consideration of a revenue share according to the NUMS's policy. If there are any arrangements for sharing revenue with third parties, they should be attached to this form. Once NUMS's ownership has been established, NUMS is free to protect and generate/avail benefits of the IP. No publication or other commercial use of IP shall take place until the IP is protected.

m. IP Due Diligence:

In case every IP application received, ORIC (NUMS) will investigate and establish patentability, ownership and third party rights, if any, attached to the IP.

n. Protection of IP:

Once due diligence process is complete, the IP&C Review Committee shall make final decision for submitting application on the related IP for patent or other protective purposes to national and/or international IP authorities. The application on this account will be filed via ORIC NUMS. The NUMS shall initially be responsible for paying any expenses associated with the protection of IP which it may cover through grants from external sources (like HEC). However, external patent costs shall be recouped from any licensee or other party which commercializes the university IP. As a minimum no commercialization of university IP should leave the university with a loss taking into consideration any expenditure, the university has made in protecting the IP.

o. Evaluation of Commercial Potential of IP:

Innovative research and/or results which may have commercial potential should be brought to the attention of the ORIC who will assess the commercial potential of IP. Financial return from university technology transfer is apparently speculative and there is generally no guarantee that a return will ever accrue. Even where returns are possible, these often take long time in coming as university technology is at a very early stage and this reality should not be ignored particularly when pursuing probable commercial opportunities for any invention or innovation. Nevertheless, the existence of a potential market for the technology is a valuable indicator of success and so in-house desktop research and market assessment by reputed external consultancy firms

may be used to ascertain the market potential for technology and current/predicted market trends. Thus final decision should usually be made on the basis of experience and expertise of the NUMS' staff in conjunction with external advice, where needed or considered appropriate.

p. Mandatory Plagiarism Policy:

The similarity index of the submitted IP disclosures will be invariably evaluated in accordance with NUMS Plagiarism Policy. ORIC will keep alert watch to ensure that false representations are not made and if detected, they are penalized in accordance with law.

q. Right of Appeal:

The inventor reserves the right to submit his/her reservations in writing against the decision of IP&C Review Committee and can provide additional supportive documents to Chairperson IP&C Review Committee through ORIC within 3-5 working days of receiving rejection letter from ORIC.

r. Incentivization of Inventors etc.:

NUMS encourages researchers to consider the potential commercial applications of their research at an early stage. NUMS will incentivize the inventors and their respective academic departments within NUMS by paying patent application filing fee and sharing of revenue generated through commercialization of the relevant innovation or invention. The incentives will be given in accordance with NUMS Policy on "Profit Distribution". NUMS through its ORIC will work with potential inventors to look into the opportunities to commercialize the IPs created with or without using NUMS services and support.

s. Release of Invention:

Where NUMS decides or otherwise determines not to file a patent application on a supported invention or to abandon a patent application on a supported invention prior to issuance of the patent, or abandons an issued patent on a supported invention, the concerned inventor(s) may request for the release of the invention. Upon determining that releasing the invention to the inventor(s) will not violate the terms of an external funding agreement and is in the best interests of NUMS and the public, ORIC may agree to a release and in such case will assign or release all interest which it holds or has the right to hold in the invention to the inventor(s) in equal shares, or such other shares as the inventors may mutually agree.

Every release of supported invention shall be allowed only if the inventor(s) agrees to perform following obligations to NUMS subsequent to the generation of income from the invention:

- 1) Reimburse all legal expenses and fees incurred by NUMS.
- 2) Pay share to NUMS equal to 20% of the net income received from the invention.

Explanation: For the purpose of sharing of income under this provision, income shall include equity received by inventors as consideration for the invention but under no

circumstance, shall it include financing received for the purposes of research and development in the relevant scientific field.

t. Reversal of Release:

- 1) NUMS may reverse or otherwise cancel the release of any invention if it is proved or otherwise believed through the known facts or circumstances that:
 - a) The released invention has not been used for public benefit or its use for public benefit has been discontinued or abandoned.
 - b) The inventor(s) has violated the conditions of release or any funding or sponsorship used or availed in the making or development of the invention.
 - c) The invention has been misused for any immoral act, illegitimate gains, financial mischief or unlawful purposes.
- 2) Where any invention has been reversed, the ownership of the invention shall exclusively, irrevocably, perpetually and solely vest with NUMS without any sharing obligations of any royalty accruable therefrom in future and NUMS shall have full rights to use such invention for any future academic, research, healthcare(medical), philanthropic, business, commercial or entrepreneurial purposes both at national and international level.

4. Institutional Animal Care and Use Committee

Institutional Animal Care and Use Committee (IACUC) oversee the use of animals in research and teaching. Their role includes approving and monitoring the use and supply of animals for these purposes. No animal research or teaching may be carried out without the approval of the responsible IACUC. Formulation of IACUC will be as mentioned in IRB Form 8. IACUC must also ensure that all activities they supervise comply with the animal research legislation and use of animals for scientific purposes. As part of their monitoring role, IACUC carry out inspections of animals and facilities.

The composition of IACUC must include (ORIC-NUMS):

- a. Chairman committee
- b. A veterinarian (preferably a veterinary surgeon and a dean of institute)
- c. Member (An officer from basic sciences)
- d. Member (An officer with understanding and experience of Animal use and care)
- e. Secretary (Manager from ORIC)
- f. An independent representative (who will assist in project approvals).
- g. A practicing Animal Handler (expert in animal use and care).

The composition of IACUCs provides an avenue for public participation in the regulation of animal research. Committees must consider and evaluate requests to use animals for research or teaching activities on the basis of applicants' responses to a comprehensive set

of questions including the justification for the research, its likely impact on the animals, and procedures for preventing or alleviating pain and distress.

On behalf of the establishment for which they operate, IACUCs have the power to stop non-approved activities and may withdraw approvals for on-going work. They can also require that adequate care, including emergency care, is provided. They provide guidance and support to researchers on matters relevant to animal welfare through the preparation of guidelines and dissemination of relevant scientific literature. They are also responsible for advising their establishments on plans and policies that may affect animal welfare.

a. Animal care

When animals are involved in teaching or research activities, ensuring that they are given the best possible standard of care is fundamental to achieving animal welfare goals. The Code of Practice sets out the general principles which need to be followed to achieve this but it does not prescribe specific standards, as these need to be regularly reviewed and revised to take into account new knowledge.

b. Animal supply

The supply of animals for scientific purposes must be regulated under IACUC to ensure that standards of animal care meet the requirements of the Code of Practice, including the management of animal production so animals are not produced in numbers excessive to requirements.

c. General statement of policy

- 1) When submitting a project proposal to IACUC for approval, the principal investigator has a duty to disclose all interactions with other institutions relevant to that proposal.
- 2) The principal investigator has a responsibility to ensure that the animal care and ethical committees of all institutions involved in the project are kept informed of all relevant correspondence and all significant aspects of the project.
- 3) The principal investigator is responsible for ensuring that monitoring of animals is appropriate at each site and of a standard considered satisfactory to the relevant IACUC.
- 4) The principal investigator may delegate the implementation of actions to fulfill these responsibilities to another individual but retains primary responsibility at all times. This delegation should be approved by the IACUC.
- 5) IACUCs and Accredited Research Establishments (ORIC) have a responsibility to maintain lines of communication with their collaborating counterparts to facilitate exchange of information about a collaborative project and enhance their monitoring activities.
- 6) Wherever possible, they should try to streamline procedures so as to avoid duplication of effort by investigators

d. Duties

- 1) To review all proposed research and provide advice to scientists, students and consultants on how to best design their studies, taking into account the 3Rs (replacement, reduction, refinement).
- 2) To ensure that all animals used receive the best care and attention to their welfare, while also being compliant with the relevant legislation and codes of practice.
- 3) To review, assess and approve all personal and project license applications to the committee officer and to maintain close contact with the committee.

e. Justification

As for any application to conduct animal research, clear justification for the need to use animals should be provided. The need to use a particular species of animal must also be justified.

Assessment of the justification necessarily involves an assessment of the educational value of the procedures. The extent of knowledge and experience of the procedures within the relevant Profession must also be assessed

f. Frequency of IACUC meetings

IACUC meetings must be scheduled bimonthly/ or as and when required. However, there may be exceptional circumstances where a meeting may not actually take place. Dean ORIC may attend IACUC deliberations periodically as a non-voting participant for independent quality assurance and feedback.

Exceptional circumstances where a face-to-face meeting may not occur would be:

- 1) Where the IACUC has insufficient business to justify a full meeting or where there are no projects to consider. However, the agendas of meetings should include inspections of facilities, animals and procedures.
- 2) Discussion of general and ethical issues and policies such as increased use of alternative methods to improve communication between IACUCs, staff researchers or teachers, such as the holding of information sessions
- 3) a review of the functioning of the committee and its resources
- 4) discussion of any other business considered by any of the IACUC members to be important

g. Monitoring of Animals

Management and care of animals must be in compliance with the Code of Practice. Pre-operative considerations include the adequacy of facilities for animal transport and housing and the area used for induction of anesthesia. Pre-operative handling and management must take into consideration the physiological and social needs of the species (for example, times required for pre-operative fasting and the avoidance of social isolation of animals).

Choice of anesthetic agents (including methods of induction of anesthesia) must be appropriate for the procedure to be performed and the species. Animals under anesthesia must be adequately monitored in compliance with the Code of Practice.

Consideration should include the numbers of people available to monitor anesthetic depth and the qualifications of these people. Protocols must provide information on the number of workshops to be conducted, the number of animals to be used and the number of people to be trained.

h. Specific medical research field

All the research done under NUMS involving clinical trials, study about disease progression, prognosis, treatment efficacy, needs specific research model /design. However, all epidemiological surveys can be done without a research model but a specific research layout needs to be designed for conducting surveys.

Here are five steps for setting up a research study:

- 1) Protocol Development
- 2) Application for animal handling
- 3) Review by animal model Committee (ethical committee)
- 4) Billing Codes for material used in experiment
- 5) Scheduling

i. Guidelines for the procedure completion

All proposals to use animals for research, teaching or product testing must be submitted in writing to animal ethical committee (NUMS) and approved before the research is undertaken.

Full information should be provided on:

- 1) justification for the use of animals
- 2) justification for the number of animals and species used
- 3) procedures to be used
- 4) The expected impact on the welfare of the animals and the methods which will be used to avoid and alleviate adverse impact.

Application form attached as IRB Form 9 has to be filled according to checklist IRB Form 10 and submitted to animal ethical committee (NUMS) to complete approval process for commencement of experiments.

j. Communicating the decision

The decision should be communicated in writing to the applicant on IRB 6 form after the approval from IACUC, preferably within a week time of the meeting.

5. Financial Support for Journal Publication Fee

a. Aim:

To support the NUMS faculty/researchers in publishing research articles/ papers/ findings in ISI-indexed (Clarivate Analytics), Web of Science (WoS) JCR and Scopus with Impact Factor and non-Impact Factor Journals subject to the following:

- 1) Faculty & Researchers are encouraged to publish research findings/papers in free of cost quality journals e.g. WoS indexed journals, JCR/W-Category and Scopus indexed.
- 2) In case of any publication fee, a fee waiver/concession request will be initiated/processed by the applicant/author with the concerned publisher and documentary evidence of fee waiver/concession request will have to be submitted with the case.
- 3) In case a waiver is not obtained, NUMS shall provide support in publication fee/charges in line with below-mentioned categories;

b. Process:

The case for publication fee support will be processed at ORIC after assessment of compliance with Para 1a & 1b along with the following: -

- 1) Covering letter through HoD/proper channel with:
 - a) A copy of accepted/published manuscript
 - b) Original invoice/receipt confirming payment of publication charges
 - c) Originality Report
 - d) Approval certificate from Institutional Review Board & Ethical Committee.
- 2) Publications must include the name of “National University of Medical Sciences” in addition to own institute.
- 3) Only those papers shall be considered for publication fee/charges where 1st or corresponding author are affiliated with NUMS.
- 4) While choosing a journal for paper publication, precaution shall be taken to avoid NUMS publication with spurious/ predatory/fake /greedy publishers and journals.
- 5) In case of a book publication or chapter in a book, financial support shall be provided only after assessing the research worth and publishing group by the Review Committee as constituted by the Vice Chancellor.

c. Settlement of Accounts:

- 1) Publication fee support will be provided from ORIC annual budgetary fund allocated under respective head.
- 2) In case any funds remain unutilized till the last quarter of a financial year, the unspent amount may be re-appropriated to other research head(s) after approval from the Vice Chancellor.
- 3) In no case, publication fee in any form or manner shall be claimed from NUMS as a matter of right.

6. Financial Support for Research

a. Aim:

To facilitate and motivate NUMS faculty, researchers, staff and students to undertake more productive and purposeful research work, NUMS has laid down a framework for financial support to research activities in the university. NUMS shall provide financial support for basic and applied research, commercially viable projects and MPhil/MS & PhD students.

b. Applicability:

Enrolled Faculty / Researchers / PG Students / UG Students (URF Only) of NUMS and its Constituent Colleges / Institutes.

c. Process:

The projects for research funding under each head will be processed in line with the following conditions:

- 1) Research project proposal for funding whether in part or full shall be considered only if such proposal is submitted on a complete Institutional Project Grant Form as prescribed by NUMS ORIC.
- 2) Any research project which is directly benefiting to NUMS vision.
- 3) Duly filled application form shall be submitted to ORIC after getting approval from the respective Principal / Dean / Commandant of the Institution.
- 4) Funds shall be released on recommendations of the NUMS-Grant Review Committee as constituted by the Vice Chancellor.
- 5) Approval certificate from NUMS-Institutional Review Board and Ethical Committee shall be mandatory before commencement of project.
- 6) Award letters shall be issued by the NUMS ORIC on approval by the Competent Authority.

d. Settlement of Account:

- 1) Respective institution/ department will have to submit the funds utilization report duly verified and audited by internal auditor to NUMS-ORIC.
- 2) Where any funds remain unutilized in any category till the last quarter of a financial year, the unspent amount may be transferred to other research head(s) after approval from the Vice Chancellor.
- 3) In no case, a research support in any form or manner shall be claimed from NUMS as a matter of right.

7. NUMS-SOP "Hiring of Research Associate, Research Assistant and Studentship Under Approved Research Grants"

- a. An application on proforma (attached) for induction of Research Associate, Research Assistant and/or Studentship (BS, MS & PhD) along with project award letter will be submitted by PI to ORIC through respective HOD.
- b. ORIC will conduct the initial scrutiny of application in line with the guidelines of the funding agency.
- c. After scrutiny, ORIC will intimate HR Dte for advertising the post on NUMS Website.
- d. List of applicants will be shared by HR Dte with PI, keeping ORIC in the
- e. PI of the project will shortlist 5 candidates against each post,
- f. A selection board comprising of Dean/Principal/Commandant (Chair), HOD, PI, 1 x faculty member of relevant discipline, 1 x Rep of HR and 1 x Rep of ORIC will recommend an appropriate candidate out of the interviewed candidates.

- g. The proceedings of selection board along with the relevant documents duly completed and endorsed by the members of the board will be forwarded to ORIC by the respective department.
- h. ORIC will process the proceedings of selection for approval of the Vice-Chancellor and will send the approved case to HR Dte for issuing the appointment letter to the selected candidate keeping all concerned in the loop

NUMS ADMISSION ELIGIBILITY CRITERIA

S. No	Discipline	Institutes	Eligibility Criteria
Doctor of Philosophy (PhD) Programs			
1.	Biochemistry	AM College, Rawalpindi	MPhil/ FCPS or equivalent degrees in relevant discipline (after MBBS) with First Division in the Annual System/ CGPA of 3.0 out of 4.0 in the Semester System <ul style="list-style-type: none"> • Valid registration with regulatory body • University entry test with minimum 70% qualifying score • Each applicant will submit an Academic Statement of Purpose (ASOP)*. • NUMS interview * Academic Statement of Purpose. <ul style="list-style-type: none"> ▪ Word limit: Approximately 800 to 1000 words (12-point font) ▪ It should have four sections, though they don't need to be clearly defined as sections in the document: <ol style="list-style-type: none"> a) Academic & Professional Preparation b) Focused Interest in the Field c) Career plans upon completion of the program d) Any relevant strengths or weaknesses in background or ability to carry out professional responsibilities
2.	Physiology		
3.	Molecular Medicine		
4.	Pharmacology		
5.	Pathology	AFPGMI/ AFIP Rawalpindi	
<p>* Academic Statement of Purpose. Each applicant must submit an Academic Statement of Purpose (ASOP). The Academic Statement of Purpose helps the admission committee understand student's academic objectives and determine whether he/she has the potential to be successful in this program.</p> <p>Word limit. Approximately 800 to 1000 words (12-point font)</p> <p>Pattern. The Statement of Purpose should have four sections, though they don't need to be clearly defined as sections in the document and can take on the more natural feel of a letter:</p> <ol style="list-style-type: none"> a. Academic & Professional Preparation b. Focused Interest in the Field c. Career plans upon completion of the program <p>Any relevant strengths or weaknesses in background or ability to carry out professional responsibilities.</p>			
MPhil Programs			
6.	Anatomy		

7.	Physiology	AM College, Rawalpindi	<ul style="list-style-type: none"> • MBBS*/BDS** or equivalent duly recognized by the concerned regulatory authority. • Valid registration with PM&DC (where applicable) • GAT (General) with a minimum 50% of cumulative score. GAT will be valid for a period of two years • NUMS interview <p>* MBBS: MBBS can apply in Basic Medical Sciences (Anatomy, Physiology, Biochemistry, Pharmacology, Community Medicine, Chemical Pathology, Microbiology, Hematology, Molecular Medicine)</p> <p>** BDS: BDS can apply in Basic Medical Sciences (Anatomy, Physiology, Biochemistry, Pharmacology, Science of Dental Materials, Oral Pathology, Molecular Medicine)</p> <p>Non-MBBS/ Non-BDS : Non-MBBS/ Non-BDS with sixteen years of education in relevant filed can apply for Molecular Medicine only</p>
8.	Biochemistry		
9.	Molecular Medicine		
10.	Pharmacology		
11.	Community Medicine		
12.	Science of Dental Materials		
13.	Chemical Pathology	AM College, Rawalpindi, AFPGMI/AFIP Rawalpindi	
14.	Microbiology		
15.	Oral Pathology	AFPGMI/AFIP Rawalpindi	
16.	MS in Transfusion Medicine	AFPGMI/AFIT Rawalpindi	<ul style="list-style-type: none"> • MBBS/equivalent duly recognized by the concerned regulatory authority. • Valid registration with PM&DC. • NUMS Entry Test with min 50% qualifying score. • NUMS interview
17.	Master of Science in Public Health (MSPH)	AFPGMI	<p>Sixteen years of education in relevant field and one of the following qualifications or an equivalent degree from HEC recognized university</p> <ul style="list-style-type: none"> • MBBS/BDS • BS Nursing • BS AHS • Pharm-D/ DPT/DVM • Or any equivalent degree • One-year full time work experience in the public/ private healthcare setting community relevant field. <ul style="list-style-type: none"> • NUMS entry test with minimum 50% of cumulative score • NUMS interview

18.	MSc in Healthcare Administration.	AFPGMI	<ul style="list-style-type: none"> • MBBS/ BDS/ Equivalent duly recognized by the concerned regulatory authority. • Valid registration with PM&DC Pakistan.
19.	Master of Science (MSc) Cardiac Anaesthesia	AFPGMI/AFIC	<ul style="list-style-type: none"> • MBBS or equivalent duly recognized by the concerned regulatory authority. • Valid registration with PM&DC • One-year house job • Two years' experience in Anaesthesia at a recognized institute/ hospital • NUMS entry test with minimum 50% of cumulative score • NUMS interview
20.	Diploma in Cardiology		<ul style="list-style-type: none"> • MBBS or equivalent duly recognized by the concerned regulatory authority. • Valid registration with PM&DC • One-year house job • One-year experience in the relevant field • NUMS entry test with minimum 50% of cumulative score • NUMS interview
21.	Clinical Fellowship in Otolaryngology & Audio-Vestibular Rehabilitation	AFPGMI/CMH	<ul style="list-style-type: none"> • FCPS/FRCS /MS or equivalent qualification recognized • Valid registration with PM&DC. • NUMS Entry Test with min 50% qualifying score • NUMS interview
22.	Masters in Health Professional Education	NUMS DHPE	<ul style="list-style-type: none"> • Sixteen years of education in relevant field: <ul style="list-style-type: none"> ▪ MBBS/ BDS or equivalent ▪ BS Nursing ▪ BS AHS • Valid registration with regulatory body wherever applicable. • NUMS entry test with a minimum 50% of cumulative score (for masters only) • NUMS interview
23.	Certificate in Health Professions Education (CHPE)		<ul style="list-style-type: none"> • Sixteen years of education in the discipline of: <ul style="list-style-type: none"> ▪ MBBS/BDS or equivalent ▪ BS Nursing 4 year's Program ▪ BS Allied Health Sciences

			<ul style="list-style-type: none"> Valid registration with regulatory body if applicable
24.	<ul style="list-style-type: none"> MS Biotechnology MS Human Genetics MS Microbiology & Immunology 	NUMS Department of Biological Sciences	<ul style="list-style-type: none"> Sixteen years of education in the relevant discipline from HEC recognized institute NUMS entrance test 50% NUMS interview
25.	MS Phytochemistry and Natural Products		<ul style="list-style-type: none"> Candidate with sixteen years of education from HEC recognized institutes/international recognized institutes with background in the following subject areas, Biosciences (Plant Sciences, Biochemistry, Molecular Biology, and Biotechnology, Microbiology), Pharmaceutical Sciences (Pharm D, B. Pharm), Chemical Science (Natural Products Chemistry/Organic Chemistry), Health Sciences (Medicine, Herbal/Traditional Medicine, Veterinary Medicine) NUMS Entry Test 50% score NUMS interview
26.	MS Bioinformatics		<ul style="list-style-type: none"> Sixteen years of education BS (Hons) or MSc in Biological Sciences, Computer Sciences, Pharmacy or Medicine (MBBS, BDS, DVM) from HEC recognized institute NUMS entrance test 50% NUMS interview
27.	Post Graduate Certificate in Palliative Care (PGCPC)	NUMS Clinical Trial Unit	<ul style="list-style-type: none"> 16 Years of Education in relevant discipline with: <ul style="list-style-type: none"> MBBS/BDS (we strongly recommend interns, residents, primary health physician, doctors involved in Oncology/ICU patient care) BS Nursing (nurses working in oncology, home health services, ICU, internal medicine or any other department involved in managing palliative care patients) Doctor of Physiotherapy, Doctor of Pharmacy, BS/MS in Public Health, BS Social Sciences, BS Psychology, BS

			Behavioral Sciences, BS Anthropology and Allied Health Sciences. <ul style="list-style-type: none"> Valid registration with regulatory body, wherever applicable
28.	Clinical Certification in General Body & Vascular Interventional Radiology	AFPGMI/AFIRI	<ul style="list-style-type: none"> FCPS / FRCR Radiology Minimum one-year post FCPS work experience Registration with PM&DC. Interview NOC for the candidates in service from their competent departmental authorities
29.	Clinical Certification in Hybrid Imaging		<ul style="list-style-type: none"> Completed four years training in Radiology or MCPS/FCPS/FRCR (Diagnostic Radiology) degree. Registration with PM&DC. Interview NOC for the candidates in service from their competent departmental authorities
UNDERGRADUATE PROGRAMS			
30.	MBBS/BDS	AM College, Affiliated Colleges	As per regulatory authority policy
31.	BS Nursing (Generic)	AFPGMI, Affiliated Colleges	<ul style="list-style-type: none"> F.Sc (Pre-Medical) / A Level or Equivalent qualification Minimum score 60% aggregate marks <ul style="list-style-type: none"> NUMS Entrance test
32.	BS Nursing (Post RN)		<ul style="list-style-type: none"> Diploma in General Nursing with minimum 2nd division by the PNC Board One-year diploma in midwifery or in any specialty 3-years' Experience after Midwifery or specialty in nationally recognized hospital <ul style="list-style-type: none"> Registration with Pakistan Nursing Council.
33.	<ul style="list-style-type: none"> BS Cardiac Perfusion (CP) BS Medical Laboratory Technology (MLT) BS Medical Imaging Technology (MIT) 	AFPGMI	<ul style="list-style-type: none"> F.Sc (Pre-Medical) / A Level or Equivalent qualification Minimum score 50% aggregate marks <ul style="list-style-type: none"> NUMS Entrance test

34.	BS Social Science of Health	NUMS, DSBS	<ul style="list-style-type: none"> • F.Sc (Pre-Medical or Pre-Engineering), F.A., ICS, I.Com, A Levels, High School Diploma, International Bacculaureate or equivalent qualification with a minimum 2nd division • NUMS Admission Test <ul style="list-style-type: none"> ▪ Interview
35.	BS Biological Sciences <ul style="list-style-type: none"> • Biotechnology • Genetics • Microbiology 	NUMS, DBS	<ul style="list-style-type: none"> • F.Sc. Pre-medical/A levels or equivalent with at least 60% marks <ul style="list-style-type: none"> ▪ NAT (General)/ MDCAT with minimum 50% of cumulative score OR NUMS Admission Test
36.	BS Public Health (BSPH)	NUMS, DPH	<ul style="list-style-type: none"> • FSc (Pre-Medical or Pre-Engineering), FA, ICS, I. Com, A levels • NUMS Aptitude Evaluation • Candidates having equivalent foreign academic qualifications should provide their equivalence certificate from IBCC
37.	BS Psychology	NUMS, Dept of Psychology	<ul style="list-style-type: none"> • FSc (Pre-Medical or Pre-Engineering), F. A., I. Com, A Levels, High School Diploma, International Bacculaureate or equivalent qualification (Equivalence certificate from IBCC required in case of foreign qualification) with minimum score 50% aggregate marks <ul style="list-style-type: none"> ▪ NUMS Admission Test with min. 50% cumulative score
38.	BS Human Nutrition and Dietetics	NUMS, Dept of Nutrition	<ul style="list-style-type: none"> • FSc (Pre-Medical or Pre-Engineering), F. A., I. Com, A Levels or equivalent qualification (Equivalence certificate from IBCC required in case of foreign qualification) with minimum score 50% aggregate marks • NUMS Admission test-min. 50% cumulative score

NUMS CHECKLIST FOR DEVELOPMENT OF CURRICULUM

S #	Documents Required	Attached		
		Yes	No	Annex
1.	Exact title of program that will appear on the degree			
2.	Program need assessment			
3.	Brief Introduction of the Program			
4.	Scope and employment perspective of program			
5.	Mission of the Program			
6.	Outcome of the Program			
7.	Expected competencies			
8.	Entry Requirement of Program			
	• Admission criteria			
	• Admission test/ interview/ Merit computation			
	• Number of students			
9.	Program Details			
	• Academic Calendar			
	• Scheme of Study (course titles, course codes and credit hours)			
	• Course outcomes/ objectives			
	• Course contents/assignments/projects			
	• Teaching methodologies/instructional strategies			
	• Assessment tools			
	• Learning resources/ references			
10.	Faculty			
	• List of teaching faculty in relevant field (minimum six as per HEC requirement)			
	• List of staff other than faculty			
11.	Educational Resources/ Administrative Structure			
	• Library			
	• Laboratories			

	<ul style="list-style-type: none"> Lecture halls etc 			
12.	Students advisory services			
	<ul style="list-style-type: none"> Communication with the students 			
	<ul style="list-style-type: none"> Career Guidance 			
	<ul style="list-style-type: none"> Counseling Service 			
13.	Examination/ Assessment			
	<ul style="list-style-type: none"> Formative assessment 			
	<ul style="list-style-type: none"> Summative assessment 			
14.	Program Evaluation			
	<ul style="list-style-type: none"> Feedback process by students and faculty regarding course, faculty and overall program 			

CHECKLIST: LAUNCHING OF PhD/MASTERS/EQUIVALENT PROGRAMS

S #	HEC Criteria	Attached		
		Yes	No	Annex
1.	Act/Charter of the University to offer the said program			
2.	Approval of the University statutory body to start/launch new program			
3.	NOC of accreditation Council to launch a professional program (if applicable)			
4.	Exact title of program that will appear on the degree			
5.	Brief Introduction of Program			
6.	Vision/Mission of the Program			
7.	Objective to offer Program			
8.	Entry requirement of Program			
9.	Number of students			
10.	Scope regarding market, social and employment perspective of program			
11.	Curriculum of the program			
	• Learning objectives			
	• Course content			
	• Learning outcomes			
	• Teaching methodologies/instructional strategies			
	• Learning resources			
11.	• Table of specifications of each course			
12.	Duration of the program and semester-wise course breakdown			
13.	Attested copy of list of existing faculty (faculty registration certificates, appointment letter and leave applications)			
14.	List of staff other than faculty along with salary slip (Current and last oneyear)			
15.	There is a requirement of appointing full time relevant PhD faculty (minimum two PhDs for launching an MS/MPhil/equivalent program and three PhDs for a PhD/Equivalent program). Please provide copies of following documents in respect of each PhD faculty member			

16.	For PhD Program Only PhD thesis review policy (by two foreign experts from technologically/ academically advance countries and one local reviewers/ committee.			
17.	For PhD Program Only There is a requirement of research papers in HEC recognized journals (only published (not accepted) papers shall be considered to the credit of PhD scholar.			
18.	Please provide copies of the following documents in respect of each PhD faculty members:			
	a) Appointment order/notification			
	b) Joining report along with current statues of employment			
	c) CV along with one recent passport size photograph			
	d) Copy of PhD and MS/MPhil/Equivalent degrees and their translation in English (if required)			
	e) Copy of transcripts of grades of PhD and MS/MPhil/Equivalent degrees			
	f) Abstracts of theses of PhD and MS/MPhil/Equivalent degrees			
	g) Equivalent certificate in case of foreign degrees (if applicable)			
	h) Area of specialization			
	i) Copy of CNIC			

Name of HoD: _____ Signature of HOD: _____

Email address of HoD: _____ Contact # (cell & Off #): _____

TEMPLATE FOR COURSE FILE

Institution:	Department:
---------------------	--------------------

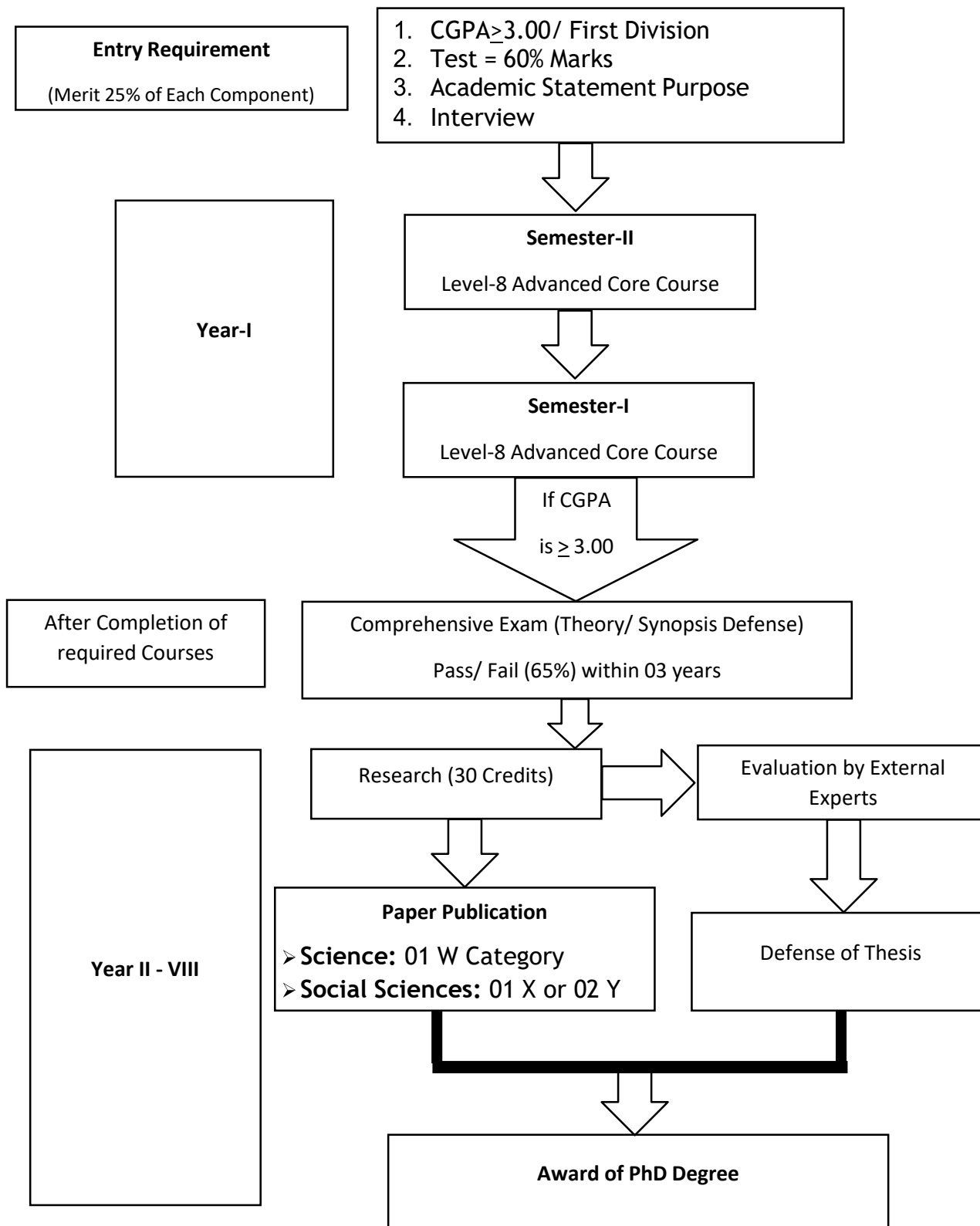
S. No	Documents	Yes	No
1.	Course Code and Title		
2.	Description of course/learning outcomes		
3.	Course Syllabus		
4.	Weekly teaching Schedule		
5.	Dates of mid-semester examination		
6.	Grading Policy: Quizzes, Mid-semester examination and final examination		
7.	Assessment type and schedule		
8.	Copy of each homework assignment		
9.	Copy of question papers for Quizzes		
10.	Copy of question papers for mid semester examination		
11.	Copy of question papers for final/ semester end examination		
12.	Data on the grades obtained by students		
13.	Difficulties/problems faced by the teacher and students during course.		

Name of Course Instructor: _____

Signature: _____

Date: _____

CONDUCT OF PhD PROGRAM



POSTGRADUATE (PG) FORMS (Downloadable from NUMS website)

S. No	Form No	Title
i.	PG-01	Post-graduation Registration Form
ii.	PG-02	Application Form for Migration/Transfer of Credit
iii.	PG-03	Request for Freezing of Semester
iv.	PG-04	Appointment of Supervisor/Co- Supervisor
v.	PG-05 (a)	Graduate Supervisory Committee (GSC) (PhD Program-GSC)
vi.	PG-05 (b)	Graduate Supervisory Committee (GSC) (Master Program - GSC (Medical Programs))
vii.	PG-05 (c)	Graduate Supervisory Committee (GSC) (Master Program - GSC (Non-medical Programs))
viii.	PG-06	Petition for Change in Graduate Supervisory Committee
ix.	PG-07	Improvement/Repeat Course Form
x.	PG-08	Bi-annual Progress Report
xi.	PG-09	Synopsis Submission Form
xii.	PG-10	Synopsis Evaluation Report
xiii.	PG-11	Synopsis Approval/ Qualifying Examination (B) Report
xiv.	PG-12	Change of Synopsis Title/ Project
xv.	PG-13	Thesis/Dissertation Submission/ Verification
xvi.	PG-14	Thesis/Dissertation Evaluation Report
xvii.	PG-15	Publication/ Article Submission
xviii.	PG-16	Thesis/ Dissertation Oral Defense Report
xix.	PG-17	Final Thesis/Dissertation Approval Report
xx.	PG-18	Check List for Award of Degree

END SEMESTER EXAMINATION**Theory Paper****Option I - Medical & Biological Sciences Programs**

Assessment tool	Selected Questions	Response	Constructed Questions	Response
	Single Best MCQs		SAQs/SEQs/Essay Questions	
Number	25 - 60		07 - 10	
Weightage	40%			
Time	120 - 150 minutes			
Marks	As decided by Departmental Board of Studies			
Level of difficulty	Application			

Option II- Social Sciences/ Humanities/ Education/ Management Programs

	Total time: 150 minutes
	Total Marks: 80 Marks
Assessment tool	Essay questions
Number	06 - 08
Time	18 - 25 minutes / question
Total Marks	10 - 14 marks / question
Weightings	Total: 40%
Level of difficulty	Application



STUDENTS' FEEDBACK PROFORMA

Academic year 2021 Semester First Date of feedback _____

Please mark appropriate column by ✓

(Rating: 1 - Excellent, 2 - Very good, 3 - Good, 4 - Fair, 5 - Below average)

Name of Course:		Course Code:				
Core Questions: Course		1	2	3	4	5
1.	Course outcomes/contents were clearly mentioned & provided at the start of course					
2.	Course contents were aligned with learning outcome					
3.	Teaching and learning methods encouraged your participation					
4.	Time allocated to the course was sufficient and manageable					
5.	Learning environment was comfortable and conducive to learning					
6.	Learning resources were relevant & helpful					
7.	The provision of learning resources in the library was adequate and appropriate					
8.	The course stimulated my interest and thought on the subject area					
9.	Assignments were helpful for learning of core concepts					
10.	Practical / skill development sessions were helpful for learning of core concepts					
11.	Assessment was in line with the provided Table of Specifications					
12.	Methods of assessment were appropriate					
13.	Satisfied with over all conduct of the course					
Core Questions: Faculty		1	2	3	4	5
1.	The Instructor is prepared for each class					
2.	The Instructor demonstrates knowledge of the subject					
3.	The Instructor has completed the whole course					
4.	The Instructor provides additional material apart from the textbook					
5.	The Instructor communicates the subject matter effectively					
6.	The Instructor shows respect towards students and encourages class participation					
7.	The Instructor maintains an environment that is conducive to learning					
8.	The Instructor is punctual					
9.	The Instructor is fair in examination					
10.	The Instructor was responsive to student's need and problems					
11.	The Instructor dealt effectively with my problems					
Comments/ Suggestions:						
Name & Signature of the student (Optional): _____						

PAY SCHEDULE (see sub-section (1) of section 7)						
NUMS Pay Scale (Pak. rupee)						
Pay Scale	Basic Pay			Allces	Gross Salary (all inclusive)	
	Min.	Increment	Max.		Min.	Max.
1	10,833	801	30,868	9,208	20,040	40,075
2	12,584	811	32,854	10,696	23,280	43,550
3	13,330	865	34,944	11,330	24,660	46,275
4	15,633	892	37,938	13,288	28,920	51,225
5	16,346	996	41,256	13,894	30,240	55,150
6	21,243	1,013	46,568	18,057	39,300	64,625
7	24,811	1,102	52,361	21,089	45,900	73,450
8	28,346	1,252	59,656	24,094	52,440	83,750
9	30,565	1,864	95,795	25,980	56,544	121,775
10	34,379	2,424	119,203	29,222	63,600	148,425
11	53,189	2,738	149,014	45,211	98,400	194,225
11-Plus	60,104	4,490	217,237	51,088	111,192	268,325
12	67,135	4,629	275,436	57,065	124,200	332,500
13	82,703	6,156	359,703	70,297	153,000	430,000
14	107,537	8,124	473,097	80,653	188,190	553,750



CONFIDENTIAL

National University of Medical Sciences (NUMS)

Annual Appraisal Report -Faculty

Period: (From ____ to ____)

Section 1: Personal Details
(To be filled in by the faculty)

Report Type: Normal Early Delayed Probationary

1. Name: _____ 2. Designation: _____
3. Qualification (Terminal/ Highest): _____ 4. Date of Employment: _____
5. Field of Specialization: _____

Section 2: Institutional Services

(To be filled by Reporting Officer as per evidence received from faculty at Appendix-I)

Ser	Parameter	Points/ Parameter	Count	Total Marks (pts x count)
i.	Primary Duties (HoD)	8		
ii.	Additional Administrative Duties (Section Head/ Coordinators/ Student Advisors)	6		
iii.	Participated in Program Accreditation/ SARs	3		
iv.	Convener/ Organizer of Conferences, W/Shops, Symposium, events etc.	3		
v.	Participated in Committees (Departmental or University)	3		
vi.	Participation/ Supervision of Community Services Projects and Campaigns	2		
vii.	Representation of institution in activities outside NUMS	2		
viii.	National/international collaborations established/Any other	3		
Marks awarded for Institutional Services (Max.30)		30		

6. Overall points scored for Institutional Services
(Total Marks Obtained ÷ 30 x 15)

Section 3: Research Output

(To be filled by Reporting Officer as per evidence received from faculty at Appendix-I)

Cat.	Parameter	Points/ Parameter	Count	Total Marks (pts x count)
Cat. I	Publications in ISI indexed Journal with IF	10		
	Publications (Papers/ Articles/ Case Studies) in Scopus Indexed Conference/ Journals, Case Studies HEC recognized Y Category Journals for SSH.	8		
	Publications (Papers/ Articles/ Case Studies) in NUMS Life & Sciences and HEC recognized Z Category Journals.	2		
	Publications (Papers/ Case Studies) in other Conference/ Symposium/ Peer-reviewed Workshop Proceedings	2		
Marks Awarded for Category (max. 22)				
Cat. II	R&D Project/ Industrial Projects proposal/ Consultancy and Training proposal (accepted or/ and ongoing) to funding agency PI <i>(Proposal of minimum of 0.5 M Rs and above for SSH and 2 M Rs and above for others)</i>	10		
	R&D Project/ Industrial Projects proposal/ Consultancy and Training proposal (Submitted) to funding agency PI <i>(Proposal of minimum of 0.5 M Rs and above for SSH and 2 M Rs and above for others)</i>	4		
	R&D Project/ Industrial Projects proposal/ Consultancy and Training proposal (accepted and ongoing) to funding agency Co PI <i>(Proposal of minimum of 0.5 M Rs and above for SSH and 2 M Rs and above for others)</i>	4		
	R&D Project/ Industrial Projects proposal/ Consultancy and Training proposal (Submitted) to funding agency Co PI <i>(Proposal of minimum of 0.5 M Rs and above for SSH and 2 M Rs and above for others)</i>	2		
	Funds generated through consultancy services/commercialization of R&D output (0.5 million)	5		
Marks Awarded for Category (max. 25)				

Cat. III	PhD/MS Students Supervised	4		
	PhD/MS Students Co-Supervised	2		
Marks Awarded for Category (max. 06)				
Cat IV	Books Published	8		
	Book Chapters published	4		
	Editor of Journal/ Proceedings	2		
	Reviewed Papers/ books for Journals/ Conferences	2		
Marks Awarded for Category (max. 16)				
TOTAL (Sum of Cat. I, II, III & IV), max. 69 Marks)				

7. Overall Points Scored for Research
 (Total Marks obtained ÷ 69 x 35)



CONFIDENTIAL

Section 4: Academics/ Teaching Activities

(To be filled by Reporting Officer as per evidence received from faculty at Appendix-I)

- 8. Teaching/other academic activities such as curriculum development etc
(Max. 20, 8 points per 3 credit hour course, 2 points per course developed)
- 9. External Examiner/ Paper Setter (Max. 10, 3 and 2 points for PG and UG respectively)
- 10. Overall Points for Academics & Teaching Activities (Serial 8+9)

Section 5: Personality Traits

(To be filled in by the Reporting Officer, Assign Marks on Scale 1-10)

<i>Parameter</i>	Weightage (a)	Marks (b)	Total Marks (a x b)
Punctuality	2		
Excellence in service	2		
Sense of Responsibility	2		
Team Work	1		
Attitude towards Profession	1		
Mentoring/ Sense of ownership	1		
Communication & Facilitation Skills	1		
Total			

- 11. Overall Points Scored for Personality Traits
(Total Marks obtained ÷ 100 x 20)

- 12. Overall Score (Serial 6+7+10+11):

Institutional Services	Research	Academics/ Teaching	Personality Traits	Overall Score
				100



CONFIDENTIAL

13. Comments / Recommendations by the Reporting Officer

Degree of Contact with the Faculty (Tick appropriate box):

Weak Fair Strong

(Faculty Signature)

(Signature/ Stamp of HoD)

14. Comments / Recommendations by the Dean:

Evaluation by the Reporting Officer has been (Tick appropriate box):

Lenient Fair Strict

(Signature/ Stamp of Dean)

15. Comments / Recommendations by the Counter Signing Officer

Date: _____

(Signature/ Stamp of Countersigning Officer)

Note:

- a. Enumerate only and be objective.
- b. Return the duly signed Performance Evaluation Report to the Director, HR Directorate in Confidential sealed envelope.
- c. Should not exceed 3 pages, using Time Roman Font 12 and 1.0 spacing



16. **For HR Use Only**

Overall Standing

=

Level - V

Level - IV

Level - III

Level - II

Level - I (Least)

Updated List of Faculty Template

Title of Department						
S.No	Name	Designation	Status	Qualification	PM&DC #	Date of Joining
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

Summary for the Preparation of Self-Assessment Report

Sr	Criterion x 8	Standards x 31
1	Program Mission Objectives and Outcomes	<p>1.1 The program must have documented measurable objectives that support Faculty / College and Institution's mission statements</p> <p>1.2 The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes</p> <p>1.3 The results of program's assessment and the extent to which they are used to improve the program must be documented.</p> <p>1.4 The department must assess its overall performance periodically using quantifiable measures.</p>
2	Curriculum Design and Organization	<p>2.1 The curriculum must be consistent and support the program's documented objectives.</p> <p>2.2 Theoretical background, problems analysis and solution design must be stressed within the program's core material.</p> <p>2.3 The curriculum must satisfy the core requirements for the program, as specified by the respective accreditation body.</p> <p>2.4 The curriculum must satisfy the major requirements for the program as specified by HEC, the respective Accreditation body / Councils (PMDC/PNC/PEC/PVMC etc.).</p> <p>Note: National Curriculum Review Committee (NCRC)- HEC approval required only when new curricula formulated or older versions reviewed.</p> <p>2.5 The curriculum must satisfy Medical, Nursing, Allied Health Professional and other discipline requirements for the program, as specified by the respective accreditation body / council.</p> <p>2.6 Information technology component of the curriculum must be integrated throughout the program.</p> <p>2.7 Oral and written communication skills of the student must be developed and applied in the program.</p>
3	Laboratories and Computing Facilities	<p>3.1 Laboratory manuals/ documentation /instructions for experiments must be available and readily accessible to faculty and students.</p> <p>3.2 There must be adequate support personnel for instruction and maintaining the laboratories.</p> <p>3.3 The University computing infrastructure and facilities must be adequate to support program's objectives.</p>

4	Student Support and Guidance	<p>4.1 Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.</p> <p>4.2 Courses in the major area of study must be structured to ensure effective interaction between students, faculty and teaching assistants.</p> <p>4.3 Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and career choices.</p>
5	Process Control	<p>5.1 The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented.</p> <p>5.2 The process by which students are registered in the program and monitoring of students' progress to ensure timely completion of the program must be documented</p> <p>5.3 The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with institution mission statement</p> <p>5.4 The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met.</p> <p>5.5 The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures.</p>
6	Faculty	<p>6.1 Enough full-time faculty as per HEC/PMDC/PNC requirements, who are committed to the program to provide adequate coverage of the program areas/courses with continuity and stability are available. The interests and qualifications of all faculty members must be sufficient to teach all courses, plan, modify and update courses and curricula. All faculty members must have a level of competence that would normally be obtained through graduate work in the discipline. The majority of the faculty must hold a Ph.D. in the discipline.</p> <p>6.2 All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.</p> <p>6.3 All faculty members should be motivated and have job satisfaction to excel in their profession</p>
7	Institutional Facilities	<p>7.1 The institution must have the infrastructure to support new trends in learning such as e-learning.</p> <p>7.2 The library must possess an up-to-date technical collection relevant to the program/s and must be adequately staffed with professional personnel.</p>

		7.3 Class-rooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.
8	Institutional Support	8.1 There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars. 8.2 There must be an adequate number of high-quality graduate students, research assistants and Ph.D. students. 8.3 Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.

Self-Assessment Report (Proforma) Distribution

Sr	Applicability	Proforma	Description	Semester wise distribution
1	Student	Proforma 1: Student Course Evaluation.	To be filled by each Student at the time of Course Completion	All semesters of program
		Proforma 3: Survey of graduating Students	To be filled out by each graduating students	Last semester of all NUMS Academic Programs
		Proforma 4: Research Student Progress Review form.	To be filled by each Research Student	For all bachelor's program; 7-8 semester (except Post RN BS; 4 semester) For Master's program; 3-4 semester For doctorate Program; 3 to end of research work semester it will be implemented
		Proforma 7: Alumni Survey.	To be filled by Alumni students	After the completion of each academic year
		Proforma 10: Teacher	To be filled by each Student at the time of Course	All semesters of NUMS Academic Programs

		Evaluation Form.	Completion to evaluate the performance of teacher.		
2	Faculty	Proforma 2: Faculty Course Review	To be filled by each faculty at the time of Course Completion		All semesters of NUMS Academic Programs
		Proforma 5: Faculty Survey.	To be submitted on Semester basis by each faculty member		End of semester of NUMS Academic Programs
		Proforma 9: Faculty Resume.	To be filled and updated by each faculty at the start of semester		For all semesters of NUMS Academic Programs
3	Department	Proforma 6: Survey of department offering Ph.D.	To be filled by the Director Postgraduate Studies/HoD		At the start of semester of all NUMS Academic Programs
		Proforma 8: Employer Survey.	To be filled in by HOD		After the completion of each academic year

Self-Assessment Report (SAR) Evaluation Tool

Scoring of Criterion Items

	Poor performance in most of the areas.	Fair performance in most of the areas.	Good performance for most areas / No Poor performance in any areas.	Good to Excellent Performance in all areas.	Excellent performance in all areas.	Score
Criterion 1						
Criterion 2						
Criterion 3						
Criterion 4						
Criterion 5						
Criterion 6						
Criterion 7						
Criterion 8						

Criteria Referenced Self-Assessment

Methodology and Evaluation Tool

Criterion 1 - Program Mission, Objectives and Outcomes		Weight = 0.05				
Factors		Score				
1	Does the Program have documented measurable objectives that support faculty / college and institution mission statements?	5	4	3	2	1
2	Does the Program have documented outcomes for graduating students?	5	4	3	2	1
3	Do these outcomes support the Program objectives?	5	4	3	2	1
4	Are the graduating students capable of performing these outcomes?	5	4	3	2	1
5	Does the department assess its overall performance periodically using quantifiable measures?	5	4	3	2	1

6	Is the result of the Program Assessment documented?	5	4	3	2	1
Total Encircled Value (TV)						
Score 1 (S1) = [TV/(No. of Questions *5)] *100 *Weight						
Criterion 2 - Curriculum Design and Organization						Weight = 0.05
Factors						Score
1	Is the curriculum consistent?	5	4	3	2	1
2	Does the curriculum support the program's documented objectives?	5	4	3	2	1
3	Are theoretical background, problem analysis and solution design stressed within the program's core material?	5	4	3	2	1
4	Does the curriculum satisfy the core requirements laid down by respective accreditation bodies? (refer Appendix A of the Self-Assessment Manual)	5	4	3	2	1
5	Does the curriculum satisfy the major requirements laid down by HEC and the respective council's / accreditation bodies? (Refer to appendix A of the Self-Assessment Manual)	5	4	3	2	1
6	Does the curriculum satisfy the general education, arts and professional and other discipline requirements as laid down by the respective / accreditation bodies / councils? (Refer to Appendix A of the Self-Assessment Manual) For NUMS this is applicable to Bachelor's degree programs only.	5	4	3	2	1
7	Is the information technology component integrated throughout the program?	5	4	3	2	1
8	Are oral and written skills of the students developed and applied in the program?	5	4	3	2	1
Total Encircled Value (TV)		5	4	3	2	1
Score 2 (S2) = [TV/(No. of Questions *5)] *100 *Weight						
Criterion 3 - Laboratories and Computing Facilities						Weight = 0.10
Factors						Score
1	Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students?	5	4	3	2	1
2	Are there adequate number of support personnel for instruction and maintaining the laboratories?	5	4	3	2	1
3	Are the university's infrastructure and facilities adequate to support the program objectives?	5	4	3	2	1

Total Encircled Value (TV)												
Score 3 (S3) = [TV/(No. of Questions *5)] *100 *Weight												
Criterion 4 - Student Support and Advising							Weight = 0.10					
Factors							Score					
1	Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	5	4	3	2	1						
2	Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5	4	3	2	1						
3	Does the university provide academic advising on course decisions and career choices to all students?	5	4	3	2	1						
Total Encircled Value (TV)												
Score 4 (S4) = [TV/(No. of Questions *5)] *100 *Weight												
Criterion 5 - Process Control							Weight = 0.15					
Factors							Score					
1	Is the process to enroll students to a program based on quantitative and qualitative criteria?	5	4	3	2	1						
2	Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1						
3	Is the process to register students in the program and monitoring their progress documented?	5	4	3	2	1						
4	Is the process above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1						
5	Is the process to recruit and retain faculty in place and documented?	5	4	3	2	1						
6	Are the processes for faculty evaluation & promotion consistent with the institution mission?	5	4	3	2	1						
7	Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5	4	3	2	1						
8	Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	5	4	3	2	1						
9	Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1						
10	Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures?	5	4	3	2	1						

11	Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	5	4	3	2	1
Total Encircled Value (TV)						
Score 5 (S5) = [TV/(No. of Questions *5)] *100 *Weight						
Criterion 6 - Faculty				Weight = 0.20		
Factors				Score		
1	Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	5	4	3	2	1
2	Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	5	4	3	2	1
3	Do the faculty members possess a level of competence that would be obtained through graduate work in the discipline?	5	4	3	2	1
4	Do the majority of faculty members hold a PhD degree in their discipline?	5	4	3	2	1
5	Do faculty members dedicate sufficient time to research to remain current in their disciplines?	5	4	3	2	1
6	Are there mechanisms in place for faculty development?	5	4	3	2	1
7	Are faculty members motivated and satisfied so as to excel in their profession?	5	4	3	2	1
Total Encircled Value (TV)						
Score 6 (S6) = [TV/(No. of Questions *5)] *100 *Weight						

Criterion 7 - Institutional Facilities						Weight = 0.10				
Factors						Score				
1	Does the institution have the infrastructure to support new trends such as e-learning?	5	4	3	2	1				
2	Does the library contain technical collection relevant to the program and is it adequately staffed?	5	4	3	2	1				
3	Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	5	4	3	2	1				
Total Encircled Value (TV)										
Score 7 (S7) = [TV/(No. of Questions *5)] *100 *Weight										
Criterion 8 - Institutional Support						Weight = 0.10				
Factors						Score				
1	Is there sufficient support and finances to attract and retain high quality faculty?	5	4	3	2	1				
2	Are there an adequate number of high quality graduate students, teaching assistants and Ph.D students?	5	4	3	2	1				
Total Encircled Value (TV)										
Score 8 (S8) = [TV/(No. of Questions *5)] *100 *Weight										

OVERALL ASSESSMENT SCORE = S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 + S9 + S10

= _____

Remarks:

**Assessment Results
Implementation Plan Summary**

AT Findings	Corrective Action	Implementation Date	Responsible Body	Resources Needed
1				
2				
3				
HoD's Comments (with Name & Signature)				
Principal/Commandant's Comments (with Name & Signature)				
*Director NUMS QEC Comments (with Name & Signature)				

*In Case of Affiliated Medical Colleges: Director LQEC will sign and share final report with NUMS QEC