

Table of Specification for PhD in Biological Sciences Admission Test

100 MCQs, 1 mark each

Time: 2 hours

General:	20
i) Math	
ii) English	
iii) Analytical reasoning	
Biochemistry	15
iv) Macromolecules (structure and function)	
v) Cellular metabolism and Bioenergetics	
vi) Enzymology	
Cell and Molecular Biology	15
i) Cell organelles (structure and function)	
ii) DNA replication, transcription, translation, repair	
iii) Gene regulation	
iv) Cancer Biology	
Research methodology/ethics	10
i) Ethical issues in biological research	
ii) Scientific method in research (research question, hypothesis, literature review, study designs)	
Research techniques	10
i) Molecular methods (PCR, RT-PCR, ELISA, Sequencing)	
ii) Analytical methods (spectrophotometry, HPLC and GC)	
Biotechnology	10
i) Health biotechnology	
ii) Nano biotechnology	
iii) Plant biotechnology	
Microbiology and Immunology	10
i) Bacteriology	
ii) Virology	
iii) Vaccinology	
iv) Immunity	
Biostatistics	5
i) T-test	
ii) Chi-square	
iii) ANOVA	
iv) Regression	
Bioinformatics	5
i) Multiple sequence alignments	
ii) Data retrieval	
iii) Molecular Docking	