

Table of Specifications
PhD Entrance Exam 2021
Molecular Medicine

S. No	TOPIC
1.	<p>Cell Biology:</p> <ul style="list-style-type: none"> • Chemical structure and biological functions of lipids, proteins, carbohydrates and nucleic acids
2.	<p>Enzymology</p> <ul style="list-style-type: none"> • Properties of enzymes • Factors affecting activity of Enzymes • Enzymes in diagnostics
3.	<p>Basic Molecular Biology of Eukaryotes</p> <ul style="list-style-type: none"> • DNA replication • Transcription of RNA • Protein synthesis
4.	<p>Clinical Biochemistry</p> <ul style="list-style-type: none"> • Diabetes mellitus • Dyslipidemia • Glycogen storage diseases • Lysosomal storage diseases • Jaundice • Disorders of lipid metabolism
5.	<p>DNA damage and repair in Eukaryotes</p>
6.	<p>Molecular Genetic</p> <ul style="list-style-type: none"> • Types of genetic mutations with their effect on DNA sequence <p>Genetic disorders:</p> <ul style="list-style-type: none"> • Hemoglobinopathies • Porphyrias • Inborn errors of protein metabolism • Cystic Fibrosis • SCIO
7.	<p>Molecular Techniques</p> <ul style="list-style-type: none"> • Polymerase chain reaction (PCR) with examples of its use in clinical practice • DNA/RNA extraction • Restriction endonucleases, Probes • Gel electrophoresis
8.	<ul style="list-style-type: none"> • Research Methodology • Biostatistics/Analytical • Medical Writing/ Bioethics