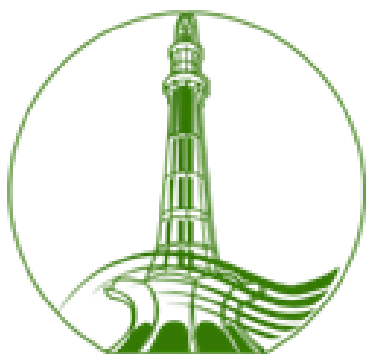


ADMISSION GUIDE

FALL 2021



THE
UNIVERSITY OF
LAHORE

Institute of Molecular Biology & Biotechnology (IMBB)

For Inquiry:
Admission Office:

UAN: 042 111 865 865

1-Km Defense Road, Off Raiwind Road, Near Bhotian Chowk Lahore.

Web: www.uol.edu.pk Email: admissions@uol.edu.pk

Program Name: BS Biochemistry & Biotechnology
BS Microbiology & Biotechnology
BS Molecular Biology & Biotechnology
BS Biotechnology
BS Zoology
BS Botany
BS Bioinformatics

Program Eligibility: Minimum (45% marks) 12 years of education/HSSC/A-Level/Intermediate or Equivalent

Program Duration: 4 Years (08 semesters)

Program Name: M.Phil Biotechnology
M.Phil Molecular biology
M.Phil Biochemistry
M.Phil Physiology
M.Phil Botany

Program Eligibility: Minimum 60% or 2.50/4.00 CGPA 16 years of education in relevant field
BS/M.Sc./MBBS/Pharm-D/DVM/B-Pharm

Program Duration: 2 Years (04 semesters)

Program Name: Ph.D Biotechnology
Ph.D Molecular biology
Ph.D Biochemistry
Ph.D Microbiology
Ph.D Zoology
Ph.D Botany

Program Eligibility: Minimum 3.00/4.00 CGPA in 18 Years of Education/M.Phil in relevant field

Program Duration: 3 Years (06 semesters)

OR

Program Eligibility: Minimum 3.00/4.00 CGPA in *16 Years of Education/BS Hons

Program Duration: Duration Minimum Five to Eight Years
* (Certain rules will apply; according to HEC/UoL Policies)

Admission Requirement: Qualify UOL Entrance Test / Interview

1. The University is authorized to amend its rules including fee any time without prior intimation.
2. The University has not authorized any publisher or person for preparation of its Entrance Tests. So please beware of such elements.

Sample ADMISSION test for Undergraduate Level (BS)

BS Biochemistry & Biotechnology, BS Molecular Biology & Biotechnology, BS Botany,
BS Microbiology & Biotechnology, BS Biotechnology, BS Zoology, BS Bioinformatics.

PART A: SUBJECT (-----)

Q1. In double stranded DNA, adenine pairs up with _____

- A. Thymine
- B. Adenine
- C. Guanine
- D. Cytosine

Answer: A

Q2. Which of the following is present inside the double helical DNA?

- A. Phosphate-sugar backbone
- B. Nucleoside
- C. Nitrogenous base
- D. Ribose sugar

Answer: C

Q3. Which of the following statement(s) is true about proteins?

- A. Amino acids are the building blocks of all proteins
- B. Proteins are essential parts of skin, hair, teeth and bones
- C. Proteins can build, repair and maintain body tissues
- D. All of the above

Answer: D

Q4. How many amino acids make up a protein commonly?

- A. 15
- B. 20
- C. 25
- D. 30

Answer: B

Q5. The average internal temperature of human body is _____

- A. 34
- B. 35
- C. 36
- D. 37

Answer: D

Q6. Transfer of pollens from anther to stigma is known as _____

- A. Germination
- B. Pollination
- C. Fertilization
- D. Gene Flow

Answer: B

Q7. The building blocks of a DNA molecule is called _____

- A. Nucleotides
- B. Nucleosides
- C. Ribose
- D. Phosphodiester bond

Answer: A

Q8. Okazaki fragments are joined together by _____

- A. Helicase
- B. Polymerase
- C. Ligase
- D. Primase

Answer: C

Q9. The flow of genetic information from DNA to mRNA is known as _____

- A. Replication
- B. Transcription
- C. Translation
- D. Reverse transcription

Answer: B

Q10. The branch of biology that deals with the structure of organisms, cells and organelles at the molecular level is called _____

- A. Molecular Biology
- B. Biotechnology
- C. Microbiology
- D. Human Biology

Answer: A

Q11. Photosynthesis occurs in _____

- A. Golgi complex
- B. Ribosomes
- C. Cytoplasm
- D. Chloroplast

Answer: D

PART B: ENGLISH/COMPRHENSION

Q13. He is used to ----- cricket

- A. Play
- B. Played
- C. Playing
- D. Plays

Answer: A

Q14. I am looking _____ admission in the University of Lahore

- A. To
- B. For
- C. With
- D. In

Answer: A

Q15. He crossed the broken bridge _____ warning

- A. In spite of
- B. In spite off
- C. On
- D. About

Answer: A

PART C: ANALYTICAL/MATHEMATICAL

Q16. What is the value of “X” in the equation $3X - 15 - 6 = 0$?

- A. 7
- B. -7
- C. 9
- D. -9

Answer: A

Q17. Zero is a _____ number

- A. Odd number
- B. Even number
- C. Whole number
- D. None of these

Answer: C

Sample ADMISSION test for Post graduate level

(M.Phil and PhD all offered programs at IMBB)

M.Phil and PhD Biochemistry, M.Phil and PhD Molecular Biology, M.Phil and PhD Botany,
M.Phil and PhD Microbiology, M.Phil and PhD Biotechnology, M.Phil and PhD Zoology,
M.Phil and PhD Physiology. M.Phil Forensic Sciences

PART A: SUBJECT (-----)

Q1. To initiate transcription, RNA polymerase recognizes specific sequences on the DNA strand known as

- A. Promoter
- B. Enhancer
- C. Transcription factor
- D. Primer

Answer: A

Q2. The optimum temperature for cellular RNA polymerase is _____

- A. 50° C
- B. 37° C
- C. 72° C
- D. 95° C

Answer: B

Q3. Three-dimensional shape of a protein depends on _____

- A. Peptide Bond
- B. Amino Acid Sequence
- C. Interaction of Polypeptides
- D. Interaction with molecular chaperons

Answer: B

Q4. DNA replication begins at specific sequences called _____

- A. Replication fork
- B. Template DNA
- C. Origin Recognition Complex
- D. Replication Factor C

Answer: A

Q5. During DNA replication, which of the following reactions is known as proofreading?

- A. 5' to 3' exonuclease activity
- B. 3' to 5' exonuclease activity
- C. 3' to 5' endonuclease activity
- D. 5' to 3' endonuclease activity

Answer: B

Q6. The non-coding regions (introns) of mRNA are removed by _____ during post transcriptional modification

- A. Spliceosomes
- B. RNase
- C. Invertase
- D. Liposomes

Answer: A

Q7. Synthesis of proteins occurs in the _____

- A. Cytoplasm
- B. Nucleus
- C. Nucleolus
- D. Lysosomes

Answer: A

Q8. Which of the following biological processes generate multiple mRNA molecules from a single coding gene?

- A. Alternative splicing
- B. Transcription
- C. Translation
- D. Reverse transcription

Answer: A

Q9. Which of the following RNA molecules serves as an adapter molecule(s) during protein synthesis?

- A. rRNA
- B. mRNA
- C. tRNA
- D. tRNA and mRNA

Answer: C

Q10. How many different stop codons are present in eukaryotes?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: C

Q11. Cytoplasmic division of a cell is called _____

- A. Cell plate
- B. Formation
- C. Cytokinesis
- D. Mitosis

Answer: C

Q12. Chromosomes can be visualized at the stage of _____

- A. Metaphase
- B. Late anaphase
- C. Telophase
- D. Prophase

Answer: A

Q13. Bacteria protect themselves from viruses by fragmenting viral DNA with

- A. Ligase
- B. Endonuclease
- C. Exonuclease
- D. Gyrase

Answer: B

Q14. The DNA fragments have sticky ends due to

- A) Endonuclease
- B) Unpaired bases
- C) Calcium ions
- D) Free methylation

Answer: B

PART B: ENGLISH/COMPRENSION

Q15. He was seen _____ to the school

- A. Went
- B. Going
- C. Gone
- D. Go

Answer: B

Q16. _____ it help you in your studies?

- A. Will
- B. Was
- C. Is
- D. Are

Answer: A

Q17. I _____ never seen such a beautiful picture before

- A. Did
- B. Was
- C. Have

D. Has

Answer: C

PART C: ANALYTICAL/MATHEMATICAL

Q18. What is the average of first 150 natural numbers?

- A. 70
- B. 70.5
- C. 75
- D. 75.5

Answer: D

Q19. $0.003 \times 0.02 = ?$

- A. 0.06
- B. 0.006
- C. 0.0006
- D. 0.00006

Answer: C

Q20. What is the average of the numbers: 0, 0, 4, 10, 5, and 5 ?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: D