

Roll No:

SCHOOL OF UNANI MEDICAL EDUCATION AND RESEARCH
Jamia Hamdard-110062

M.D (MOALIJAT) Ist year Annual Examination 2018
Paper No: MDM-101

Keemya Hayati wa Virasiyat (clinical biochemistry and genetics)

Time: Three Hours

Maximum Marks : 75

Attempt all questions. All parts of a question must be attempted in continuation
SECTION -A

Attempt All (Maximum 20 words for each)

(10 x 2 =20)

Q1. Answer in brief.

- (a) Define a carbohydrate? What is the difference between D and L Glucose?
- (b) What are the major groups present in the structure of an amino acid? Name two basic amino acids?
- (c) What is gene therapy? Name some diseases that can be corrected by gene therapy?
- (d) Write four important characteristics for a molecule to serve as a genetic material?
- (e) List the major difference between a DNA and RNA?
- (f) What is the difference between Euploidy and Aneuploidy?
- (g) Name the first enzyme of glycolytic pathway and which reaction does it catalyze?
- (h) Name three important biochemical parameters in LFT?
- (i) What is the chemical nature of the enzymes? What is the significance of active site?
- (j) Give two application of a DNA based diagnostic probe?

SECTION- B

Attempt Any FIVE (Maximum 100 words for each) (5 x 5 =25)

- Q2. Name the important steps involved in the detoxification of ammonia in urea cycle?
- Q3. Name different enzymes involved in DNA replication. Why is a Primer required?
- Q4. Define Lipids and classify them with suitable examples?
- Q5. Give an account of RDA, sources and deficiencies of vitamin A and Vitamin D
- Q6. What is gene mutation? Give its types.
- Q7. Define Enzyme activity? Differentiate between Direct Assays and Coupled Assays.

SECTION-C

Attempt Any THREE (Maximum 300 words for each) (3 x 10 = 30)

- Q8. What is a polypeptide bond? Briefly explain the differences between primary, secondary and tertiary structure of proteins. Cite examples.
- Q9. What is Chargaff's rule? List the important features of Watson and Crick model of DNA.
- Q10. Explain the structure and function of different types of RNA's.
- Q11. Describe the important mechanism for blood glucose regulation.
- Q12. What is the difference between autosomal and sex chromosomal disorders? Cite three examples each.
- Q13. What is a promoter? Briefly explain the process of protein synthesis.