



QUAID-I-AZAM UNIVERSITY ISLAMABAD

B.Sc. Annual Examinations--2013
(PART-I)

Roll No: _____

SUBJECT: Biochemistry

PAPER: A (Theory)

June 10, 2013

SECTION-B (SUBJECTIVE)

To be attempted in 2 hours and 35 minutes

Max Marks: 32

Note: Draw neat and labelled diagram where required.

Q No.2 Differentiate between the following pairs with suitable examples: (8)

- (a) REDUCING SUGARS and NON-REDUCING SUGARS.
- (b) EPIMERS and ENOMERS.
- (c) GLUCOSIDE LINKAGE and PEPTIDE LINKAGE
- (d) CEREBROSIDES and GANGLIOSIDES.

Q No.3

- (a) Explain the SECONDARY STRUCTURE of PROTEINS with help of diagram. (6)
- (b) What is the difference between ELECTROPHORESIS and DIALYSIS? (2)

Q No.4

- (a) What are PHOSPHOLIPS? Classify them with suitable examples? (4)
- (b) What are LIPOPPROTEINS? Draw diagram of PLASMA IPOPPROTEINS and also mention their important functions. (4)

Q No.5

- (a) Enlist WATER SOLUBLE VITAMINS. (2)
- (b) Describe the chemistry, structure, functions and the deficiency disorders of VITAMIN C. (6)

Q No.6

- (a) What are AMINO ACIDS? Classify them on the basis of their polar and non polar nature. (4)
- (b) Describe biological significance of AMINO ACIDS. (4)

Q No.7

- (a) What are POLYSACCHARIDES? Classify them, mention their structures and functions. (6)
- (b) Describe the biological role of bacterial cell walls. (2)

Q No.8

- (a) Enlist all the classes of ENZYMES and briefly discuss the role of each class. (5)
- (b) What is ENZYME ACTIVITY? Describe various factors that may affect the ENZYME ACTIVITY. (3)