

AQ-944

**M.Sc. (Part-I) Semester-II (CBCS Scheme)
Examination**

PHARMACEUTICAL CHEMISTRY

Paper-2 SA 1

(Biochemistry)

Time : Three Hours]

[Maximum Marks : 80

Note :- ALL questions are compulsory and carry equal marks.

1. (a) Enlist basic amino acids. Give classification and functions of amino acids. 5
- (b) Mention colour reactions of proteins. 5
- (c) Describe structure and function of haemoglobin. 6
- OR**
- (p) Write in brief on protein denaturation and renaturation. 5
- (q) What are peptide bonds ? Describe their functions. 5
- (r) Write in brief Ramachandra Plot. 6
2. (a) How enzymes are classified ? Describe mechanism of enzymatic reaction. Write a note on Michaelis Menton Equation. 16

OR

- (b) Mention structure and function of FMN and FAD.
Describe mechanism of action of Carboxypeptidase. 16
3. (a) Describe Recombinant DNA technology in detail. 16

OR

- (b) Use of enzymes as target for drug designing – Discuss.
Write a note on clinical use of enzymes and enzyme therapy. 16
4. Write in brief :
- (a) Glycolysis 5
- (b) DNA polymerases 5
- (c) Genetic code. 6

OR

- (p) Citric acid cycle 5
- (q) Mutarotation 5
- (r) Aminoacyl RNA synthesis. 6
5. (a) Describe membrane transports $\text{Na}^+ - \text{K}^+$ ATPase and Ca^{++} ATPase. 8
- (b) What are different types of phospholipids ? Give their functions. 8

OR

- (p) Describe membrane proteins. 8
- (q) Describe various hypothesis regarding unit membrane. 8