



M-014-003404

Seat No. _____

M. P. M. (Sem. IV) (CBCS) Examination

May / June - 2018

BP403T : Pharmaceutical Chemistry – V

(Biochemistry – II)

Faculty Code : 014

Subject Code : 003404

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Figure to the right indicate marks.
 - (2) Answers any three questions from each section question one and question five are compulsory.
 - (3) Draw neat and clean diagram when required.

SECTION – I

- 1** Answer the following questions : (Any **Seven**) **14**
- (a) What is Lesch-Nyhan Syndrome?
 - (b) What is isoelectric pH? Explain with example.
 - (c) Comment: Urea is the end product of protein metabolism.
 - (d) Give the functional classification of Proteins.
 - (e) Give the function of Messenger RNA.
 - (f) What is meaning high Energy Compound? Classify high energy compound.
 - (g) What is Hyperchromicity?
 - (h) Define: Zwitterion ions.
 - (i) Give metabolic disorders of Urea cycle.
 - (j) Comment : Glutamate is the only amino acid that undergo oxidative deamination.
- 2** Answer the following questions :
- (A) Explain the Urea cycle. **7**
 - (B) Define: Amino Acid. Discuss structure classification of Amino Acid. **6**

- 3** Answer the following question :
(A) Write a note on Electron transport chain (ETC). **7**
(B) Explain metabolism of phenylalanine. **6**
- 4** Answer the following questions :
(A) Describe the role of PRPP in Purine and Pyrimidine synthesis **7**
(B) Discuss concept of Lac operon. **6**

SECTION – II

- 5** Answer any **two** out of three : **14**
(A) Short note on "Structure of DNA"
(B) Write in brief about gel filtration chromatography.
(C) Define term Bioenergetics and Oxidative Phosphorylation. Write in brief about different hypothesis for oxidative Phosphorylation
- 6** Answer the following questions :
(A) Explain in detail structure of protein. **7**
(B) Write basic principle of electrophoresis. Classify different technique in electrophoresis? **6**
- 7** Answer the following questions :
(A) Explain the term; Denaturation, Coagulation and flocculation. **7**
(B) Explain process of DNA replication. **6**
- 8** Answer the following questions :
(A) Discuss properties of Amino Acid with examples. **7**
(B) Explain the principle of Polymerase chain reaction **6**
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