



**HJ-014-003409**

Seat No. \_\_\_\_\_

**Masters in Pharmacy Management  
(Sem. IV) (CBCS) Examination**

**May / June - 2017**

**BP403T : Pharmaceutical Chemistry - V  
(Biochemistry - II)**

**Faculty Code : 014**

**Subject Code : 003409**

Time : 3 Hours]

[Total Marks : 80

- Instructions :** (1) Figures 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) Comment : Urea is the end product of protein metabolism
  - (b) Give the function of Messenger RNA
  - (c) Define: Zwitterion
  - (d) What is meaning high Energy Compound? Classify high energy compound.
  - (e) Comment : Glutamate is the only amino acid that undergo oxidative deamination.
  - (f) What is Lesch-Nyhan Syndrome?
  - (g) Write basic Principle of electrophoresis. Classify different techniques in electrophoresis?
  - (h) What is hyperchromicity?
  - (i) What is Isoelectric pH? Explain with example
  - (j) Functions of protein.
- 2 Answer the following questions :**
- (A) Discuss concept of Lac operon **7**
  - (B) Describe the role of PRPP in purine and pyrimidine synthesis **6**

- 3** Answer the following questions :
- (A) Define : Amino Acid. Discuss structure classification of Amino Acid. **7**
- (B) Write a note on Electron Transport Chain (ETC). **6**
- 4** Answer the following questions :
- (A) Explain the Urea cycle. **7**
- (B) Explain in detail about secondary structure of proteins. **6**
- SECTION - II**
- 5** Answer any **two** out of three : **14**
- (A) Short note on "Structure of DNA"
- (B) Classify amino acid based on polarity and nutritional value
- (C) Write in brief about gel filtration chromatography.
- 6** Answer the following questions :
- (A) Write basic principle of electrophoresis. Classify different technique in electrophoresis? **7**
- (B) Define term Bioenergetics and Oxidative phosphorylation. Write in brief about different hypothesis for oxidative phosphorylation Phosphorylation. **6**
- 7** Answer the following questions :
- (A) Explain the principle of polymerase chain reaction **7**
- (B) Explain process of DNA replication **6**
- 8** Answer the following questions :
- (A) Discuss properties of Amino Acid **7**
- (B) Explain terms: Denaturation, Coagulation and flocculation. **6**