



PPB-16112030701040300 Seat No. _____

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

November / December - 2018

Pharmaceutical Chemistry - IV

(Biochemistry - I)

Time : 3 Hours]

[Total Marks : 80

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

SECTION - 1

- 1** Answer the following questions : (any seven) **14**
 - (a) What is Ketonemia and ketonuria ?
 - (b) Define Epimers with example.
 - (c) Define : Catabolism and Anabolism.
 - (d) Define : Rancidity and Saponification.
 - (e) Define : Apolipoprotein.
 - (f) Write function of Ribosome and golgi apparatus.
 - (g) What is optical activity of sugar ?
 - (h) What is tautomerization ?
 - (i) Explain : PDH complex.
- 2** Answer the following questions :
 - (a) Discuss : TCA cycles and calculate energetics in TCA Cycle. **7**
 - (b) Write a note on reaction of monosaccharides. **6**
- 3** Answer the following questions :
 - (a) What is difference between catalyst and enzyme ? **7**
Write different systems for nomenclature of enzyme.
 - (b) Enlist different factors affecting enzyme activity. **6**
How concentration of substrate and temperature affect enzyme activity ?
- 4** Answer the following questions :
 - (a) Define and classify : Carbohydrates. **7**
 - (b) Explain : Glyoxalic Acid Cycle. **6**

SECTION - 2

- 5** Answer any two out of three : **14**
- (a) Explain : Glycolysis.
 - (b) Describe the test for checking the purity of lipid and fats.
 - (c) Discuss biochemical function, dietary sources, absorption and disease states of calcium.
- 6** Answer the following questions :
- (a) Derivatives of monosaccharides. **7**
 - (b) Calculate : ATP generation in Glucose metabolism. **6**
- 7** Answer the following questions :
- (a) Define and classify lipids. **7**
 - (b) Discuss biochemical function, dietary sources and disease states of Iodine. **6**
- 8** Answer the following questions :
- (a) Explain : Transport processes across cell membrane. **7**
 - (b) What is enzyme inhibition ? Write a detail note on enzyme inhibition. **6**
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