



**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**

<b>1</b>	Answer the following questions : (any <b>seven</b> )	<b>14</b>
(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.	
<b>2</b>	Answer the following questions :	
(a)	Discuss : TCA cycles and calculate energetics in TCA Cycle.	<b>7</b>
(b)	Write a note on reaction of monosaccharides.	<b>6</b>
<b>3</b>	Answer the following questions :	
(a)	What is difference between catalyst and enzyme ? Write different systems for nomenclature of enzyme.	<b>7</b>
(b)	Enlist different factors affecting enzyme activity. How concentration of substrate and temperature affect enzyme activity ?	<b>6</b>
<b>4</b>	Answer the following questions :	
(a)	Define and classify : Carbohydrates.	<b>7</b>
(b)	Explain : Glyoxalic Acid Cycle.	<b>6</b>

## 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 : **7**

- (a) Derivatives of monosaccharides. **7**
- (b) Calculate : ATP generation in Glucose metabolism. **6**

**7** Answer the following questions : **7**

- (a) Define and classify lipids. **7**
- (b) Discuss biochemical function, dietary sources and disease states of Iodine. **6**

**8** Answer the following questions : **7**

- (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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