

**F.Y.B.PHARM. SEMESTER-II (CBCS - 2015 COURSE) :
SUMMER - 2018**

SUBJECT : PHARMACEUTICAL BIOCHEMISTRY – I

Day : **Saturday**
Date : **28/04/2018**

S-2018-3911

Time : **10.00 AM TO 01.00 PM**
Max. Marks : 60

N.B.

- 1) **Q.1 and Q.5** are **COMPULSORY**. Out of the remaining solve any **TWO** questions from each Section.
- 2) Answers to both the sections should be written in **SEPARATE** answer book.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** Answer any **FIVE** of the following: (10)
- a) What is enzyme specificity?
 - b) What are essential fatty acids? Give examples.
 - c) Name any two hydrophobic amino acids and give their structure.
 - d) What are crude fibers? Give their examples and pharmaceutical uses.
 - e) What is hard gelatin? How it is obtained.
 - f) What are allosteric modulators? Give examples.
- Q.2** a) State Michaelis-Menten equation for the rate of enzyme catalyzed reaction. Explain the meaning of each term and discuss the factors affecting the rate of enzyme catalyzed reaction. (07)
- b) Name any two enzymes which hydrolyze proteins. (03)
- Q.3** a) Describe fluid mosaic model of bio-membrane and explain membrane fluidity. (07)
- b) Give partial structure of amylopectin. (03)
- Q.4** Write notes on any **TWO** of the following: (10)
- a) Protein Data Bank (PDB)
 - b) Conformation of active site of enzymes.
 - c) Edman method for amino acid sequencing

SECTION – II

- Q.5** Attempt any **FIVE** of the following: (10)
- a) How enzymes are used for clinical diagnosis?
 - b) State industrial use of enzyme penicillin acylase?
 - c) Give the structure of sucrose and maltose?
 - d) What are liposome?
 - e) What are conjugated proteins? Give examples.
 - f) State any two industrial applications of enzymes.
- Q.6** a) What is enzyme immobilizations? Describe different types of immobilizations. (07)
- b) What are excitable membrane? Give examples. (03)
- Q.7** a) What are polysaccharide? Give their classification with examples. (07)
- b) State pharmaceutical uses of proton pump inhibitors. (03)
- Q.8** Write notes on any **TWO** of the following: (10)
- a) α -Helix conformation of peptide
 - b) Classification of lipids
 - c) Mitochondria

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