Printed Pages: 01 **Sub Code: BP203T**

Paper Id: 150208 **Roll No.** | | | | | | | | | | |

B PHARM
(SEM II) THEORY EXAMINATION 2017-18
BIOCHEMISTRY

Time: 3 Hours ***Total Marks: 75***

SECTION A

1. Attempt *all* questions in brief. **10 x 2 = 20**

a) Define mutarotation.
b) Differentiate endergonic & exergonic reactions.
c) What is phosphorolysis?
d) Define essential & non-essential amino acid.
e) How many ATP are produced in glycolysis and TCA cycle?
f) Briefly describe hypercholesterolemia.
g) Write a short note on nucleic acid.
h) Define nitrogenous bases with structure.
i) What is active center?
j) Define coenzyme and Electron transport chain.

SECTION B

2. Attempt any *two* parts of the following: **2 x 10 = 20**

a) What is monosaccharide? Discuss the glycolysis pathway and its energetics.
b) Write a note on enzyme inhibition. Explain Michaelis-Menton plot of enzyme kinetics.
c) What are ketone bodies? Give the reactions of formation of ketone bodies.

SECTION C

3. Attempt any *five* parts of the following: **7 x 5 = 35**

a) What is reducing sugar? Explain the cyclic structure of glucose.
b) Give the oxidative phase of HMP pathway. Discuss its significance.
c) Write a note on β–oxidation of saturated fatty acid.
d) What is deamination? Discuss the metabolic disorder of phenylalanine.
e) What is isoenzyme? Discuss its diagnostic applications.
f) Explain Gout disease. Give the structure of DNA & RNA.
g) What is oxidative phosphorylation? Discuss its mechanism.