Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2011 to 2016) (Sem.–5)

PHARMACEUTICAL CHEMISTRY–V

(Biochemistry)

Subject Code : BPHM-501

Paper ID : [D1160]

Time : 3 Hrs. Max. Marks : 80

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.**
3. **SECTION-C contains FOUR questions carrying TEN marks each and students has to attempt any THREE questions.**

SECTION-A

1. Explain in brief :

a. Define cofactor, and give suitable example.

b. Give name and structure of two purine bases.

c. Name and structure of unsaturated fatty acids.

d. Difference between nucleotides and nucleosides.

e. Explain enthalpy.

f. What are amphibolic pathways?

g. Give name and structure of essential amino acids.

h. Define glycolysis.

i. Give Michaelis -Menten equation.

j. Give the name and structure of two sphingolipids.

k. Define reducing sugars and give examples.

1. Metabolic products of galactose.

m. Give structure and Significance of thromboxanes.

n. What are Ketone bodies?

o. Give structure and functions of Cell membrane.

SECTION-B

2. Explain the biosynthesis and mechanism of action of Prostaglandins.

3. Define coenzymes, give various coenzymes and their sources.

4. Explain citric acid cycle and its significance.

5. Name various types of phospholipids and indicate chemical structures of each.

6. Write short note on voltage gated ion channels.

SECTION-C

7. Describe the pentose phosphate pathway and its significance.

8. Discuss the various transport phenomena across the cell membrane.

9. Define enzyme. Write Michaelis -Menten equation and transform it for lineweaver -Burk Plot. How do various inhibitors affect this graph?

10. Give detail account on genetic engineering.