

Roll No. 

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Total No. of Pages : 02

Total No. of Questions : 10

B.Pharmacy (Sem.-5)

**PHARMACEUTICAL CHEMISTRY-V (BIO CHEM)**

Subject Code : PHM-351

Paper ID : [D0122]

Time : 3 Hrs.

Max. Marks : 80

**INSTRUCTIONS 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 have to attempt any **FOUR** questions.
3. **SECTION-C** contains **FOUR** questions carrying **TEN** marks each and students have to attempt any **THREE** questions.

**SECTION-A****1. Discuss briefly :**

- a) Role of porphyrins in cancer therapy
- b) Suicide enzyme
- c) What is glyoxalic acid cycle?
- d) Define nucleoside and nucleotide.
- e) Write significance and metabolic disorder of urea cycle.
- f) How many ATP molecules are formed when palmitic acid is metabolized?
- g) What is active transport?
- h) Write about the inhibitors of oxidative phosphorylation?
- i) Define galactosemia.
- j) What is meant by PCR?
- k) How does insulin regulate blood glucose?

- 1) Define ATP and its biological significance.
- m) Give various types of RNA's and their role.
- n) Name the coenzyme forms of riboflavin and their biochemical role.
- o) Give the functions of ubiquinone.

### SECTION-B

2. Explain the fate of glucose in the body.
3. Write a note on transamination and decarboxylation of amino acids.
4. Enumerate the reactions of purine degradation and add a note on Gout.
5. Explain the salient features of allosteric inhibition.
6. Explain the mechanism by which electron transport chain is linked with ATP generation.

### SECTION-C

7. Write short notes on :
  - a) Metabolism of tryptophan
  - b) Glycogenolysis
8. Explain in detail the de novo synthesis and  $\beta$  oxidation of stearic acid.
9. What are the various steps that takes place in gluconeogenesis? Give its importance.
10. Write short note on :
  - a) Mutations
  - b) Eicosanoids