Total No. of Questions :5] *[Total No. of Printed Pages :2*

Roll No .....

PY-404

B.Pharmacy IV Semester

Examination, June 2016

Pharmaceutical Chemistry-V

(Biochemistry)

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Define Nitrogen Fixation.
   b) Explain Iso-enzymes with examples.
   c) Explain the concept of free energy with its biological significance.
   d) Define briefly the Polymerase chain reaction.

   OR

   Discuss in detail the citric acid cycle.

2. a) Explain the Beta Oxidation and its mechanism.
   b) Discuss the mechanism of Enzyme Inhibitions.
   c) Differentiate between Gluconeogenesis and Glycogenolysis.
   d) Discuss in detail the Nitrogen cycle with reactions.

   OR

   Write short note on vitamins as coenzymes with its pharmaceutical significance.

3. a) What is Genetic code?
   b) Explain chemical Mutagenesis.
   c) Explain the mechanism of metabolism of Galactose.
   d) Discuss in detail the Urea Cycle.

   OR

   Discuss in detail the biosynthesis of Purine and Pyrimidines.

4. a) What are Amino acids? Enumerates its significance.
   b) Enlist the Two application of Metal as coenzymes.
   c) Differentiate between Eicosanoids and Sphingolipids.
   d) Describe various test and strategies for detection of metabolic disorders.

   OR

   Describe the replication mechanism of DNA.

5. a) What is Redox Potentials?
   b) Enlist the two advantage of Ammonia Assimilation.
   c) Discuss the biosynthesis of Ketone bodies.
   d) Discuss in detail the Biosynthesis of RNA with biological significance.

   OR

   Write a note on biosynthesis and Catabolism of Amino acids.

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