

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm, Summer 2017-18 Examination

Semester: 5**Subject Code: 08101302****Subject Name: Pharmaceutical chemistry-VI (Biochemistry-1)****Date: 16-05-2018****Time: 10:00AM to 01:00PM****Total Marks: 75****Instructions:**

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) (20)

1. What are carbohydrates? Give classification of carbohydrates with examples. Describe in brief chemistry of starch or glycogen.
2. Draw and explain the urea cycle with structure. Give an account of disorders related to urea cycle.
3. Discuss the transport mechanism across cell membrane.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) (35)

1. Define lipids. Classify them with example.
2. Explain factors affecting on enzyme activity.
3. Describe in detail the biosynthesis of purine.
4. Differentiate between (i) Epimers and Anomers
5. Write the synthesis of ATP and give their biological significance.
6. Explain the mechanism of enzyme inhibition.
7. Write a note on Denaturation.
8. Describe the classification of amino acids along with their structures.
9. Explain various reactions of carbohydrates.

Q.3 Answer in short. (2 marks each) (20)

1. Draw the structure of cell and explain the various cell organelles.
2. Define the nucleotides and nucleosides.
3. Explain metal as co-enzyme and their significance.
4. Describe various colour reactions of amino acids.
5. Explain the metabolism of sulfur containing amino acids.
6. Explain the structure and biological role of DNA.
7. Define acid value and iodine value.
8. Describe the Edman's technique for end group analysis.
9. Give a brief account on high energy compounds.
10. Write shot note on Essential fatty acid.