

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

Semester: 6**Subject Code: 08101352****Subject Name: Pharmaceutical Chemistry-VIII (Biochemistry-II)****Date: 17/05/2018****Time: 10:00 am to 1:00 pm****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. Enlist carbohydrate metabolism pathways. Write a note on Glycolysis.
2. Describe the significance, reactions and energetics of citric acid cycle.
3. Describe biosynthetic pathway of cholesterol with diagram.

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

1. What are ketone bodies? Write note on ketogenesis along with its utilization.
2. Write a note on β -oxidation of fatty acids.
3. Explain in detail of oxidative phosphorylation.
4. Write note on DNA repair mechanisms.
5. Give detail account on enzymes involved in biological oxidation
6. Write a detail note on Lac operon.
7. Discuss Polymerase chain reaction in detail.
8. Write a short note on Genetic code.
9. Discuss in detail isolation and purification of nucleic acids.

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

1. Define: Chromatography and Electrophoresis
2. Enlist nucleic acid blotting techniques.
3. Why DNA replication is called semi-conservative?
4. Draw schematic diagram of metabolism of galactose.
5. Explain biochemical functions of Vitamin D.
6. Define Transcription and write stages involved in transcription.
7. Explain biochemical roles of Ascorbic acid.
8. Define Gluconeogenesis and Glycogenolysis.
9. Define Alpha oxidation and omega oxidation.
10. Classify vitamin.