

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**

**Pharm.D Supplementary Examination November 2017**

**Year: 1****Date: 14/11/2017****Subject Code: 08207103****Time: 10:00 am to 1:00 pm****Subject Name: Medicinal Biochemistry****Total Marks: 70****Instructions**

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

**Q.1 Essay Type Questions. (any 2 out of 3) (15 Mark Each) (30)**

1. Define and explain: Active site, Ligases, Reaction specificity, Allosteric regulation, Latent enzymes.
2. (a) Define homo and hetero-polysaccharides. Describe the structure of three homo-polysaccharides.  
(b) Write note on Mutarotation.
3. (a) Explain primary and secondary structure of protein.  
(b) Discuss reactions of proteins.

**Q.2 Short Essay Type Questions. (any 4 out of 5) (5 Mark Each) (20)**

1. Write a short note on Glycolysis pathway.
2. Explain about beta oxidation of fatty acids.
3. Write a note on HMP shunt.
4. State factors affecting enzyme activity. Explain effect of pH and temperature on enzyme and substrate.
5. Define oxidative phosphorylation. Discuss chemiosmotic hypothesis.

**Q.3 Short Answers. (2 Mark Each) (20)**

1. Draw and explain structure of cell membrane.
2. Classify and explain Phospholipids.
3. State types of transport system across Cell-membrane. Explain about active diffusion.
4. Describe components of Electron transport system.
5. Write about synthesis of melanin.
6. Write a note on deamination reaction.
7. Enlist sulfur containing amino acids. Explain about it.
8. Define terms
  - i. Biological oxidation
  - ii. Catabolism
9. Write any two chemical tests of fats and oils.
10. Write a note on ATP.