

Roll No .....

**PY-404 (GS)****B. Pharmacy IV Semester**

Examination, December 2017

**Grading System (GS)****Pharmaceutical Chemistry-V****(Biochemistry)**

Time : Three Hours

Maximum Marks : 70

- Note: i) Attempt any five questions.  
ii) All questions carry equal marks.

1. What are Enzymes? Discuss the important factors influence the velocity of the enzyme reaction.
2. Describe the production of ATP and its biological significance.
3. Discuss the reaction sequence, energetics, significance and regulation of Glycolysis.
4. Give a detailed account on Citric acid cycle.
5. What is alpha, beta and omega Oxidation? Describe the Beta oxidation of fatty acids.
6. Give an account on Oxidative Phosphorylation.

7. Describe the Urea Cycle. Add a note on metabolic disorders associated with urea cycle.
8. Answer any four of the following:
  - a) What are Co-enzymes? What is the significance of metals as co-enzymes?
  - b) Write a short note on Galactose metabolism.
  - c) Write a short note on biosynthesis of ketone bodies.
  - d) Discuss in brief about formation of bile pigment.
  - e) What is primary, secondary, tertiary and quaternary structure of protein?
  - f) Write a short note DNA replication.

\*\*\*\*\*