

Roll No .....

**PY-305**

**B.Pharm., III Semester**

Examination, December 2016

**Choice Based Credit System (CBCS)**

**Biochemistry**

*Time : Three Hours*

*Maximum Marks : 60*

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

1. Describe the reaction sequence, significance and energetics of Citric Acid Cycle.
2. Describe the reaction sequence, significance and energetic of Embden-Meyerhof Pathway.
3. Describe the Krebs-Henseleit cycle and add a note on metabolic disorders associated with it. Discuss the metabolic disorder associated with phenylalanine.
4. What are Enzymes? Discuss the important factors influence the velocity of the enzyme reaction. Add a note on enzyme kinetics.
5. Describe the  $\beta$  oxidation of fatty acid and write the disorders associated with it. Discuss the biological significance of cholesterol.
6. Describe the biosynthesis of Purine nucleotides. Add a note on DNA replication.

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7. Describe the mechanism of Oxidative phosphorylation. Discuss the inhibitors of ETC and Oxidative phosphorylation.
8. Write notes on (any two):
  - a) Protein Synthesis
  - b) Conversion of cholesterol into bile acids and hormone
  - c) Classification and biological role of Carbohydrates

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