

**End Semester Examinations - 2015-16 Even Semester - May 2016**

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**14BT2008 Metabolism and Bioenergetics**

**Set A**

**Time : 3 hrs**  
**Total Marks: 100**

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1. Elaborate in detail the reactions of TCA cycle (20 Marks)  
**OR**
  2. How pyruvate is formed- Explain the glycolysis reaction in detail (20 Marks)
  3. Discuss the biosynthetic reactions involved in urea formation (20 Marks)  
**OR**
  4. a. Brief on transamination reaction (5 Marks)  
b. Outline the biosynthetic reactions of tyrosine and phenylalanine (15 Marks)
  5. Elaborate on cholesterol biosynthesis (20 Marks)  
**OR**
  6. a. How ketone bodies are produced - Explain (5 Marks)  
b. Discuss on beta oxidation of fatty acids (10 Marks)  
c. Write the energetics of fatty acid oxidation (5 Marks)
  7. Sketch the reactions involved in purine biosynthesis (20 Marks)  
**OR**
  8. Give an account on the purine and pyrimidine degradation (20 Marks)
  9. a. Write an essay on bioenergetics with suitable examples (10 Marks)  
b. Explain about high energy compound with examples (10 Marks)
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**Wishing you All the Best**

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