

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

14BT2001 Basics of Biochemistry

Set A

Time : 3 hrs
Total Marks: 100

1. a. Explain the reactions involving CHO and CO group of sugars (8)
b. Draw the structure of eukaryotic cell and explain the biological role of cell organelles (8)
c. Differentiate between animal fat and plant fat (4)

OR
2. a. Explain the nomenclature, classification and sources of disaccharides (10)
b. Describe the sources and biological role of heteropolysaccharides with examples (10)
3. a. Describe the general properties, structure and functions of cholesterol (10)
b. Describe the nomenclature, types and properties of fatty acid with example (10)

OR
4. a. Explain the types of interaction found in tertiary structure of protein (6)
b. List out the classes of enzymes with examples (6)
c. Describe how will you measure the energy requirements of normal person? (8)
5. a. What is protein denaturation? and explain its characteristics with example (4)
b. Explain the classification of protein based on their function with examples (12)
c. Explain the entrapment method of enzyme immobilization (4)

OR
6. a. Elaborate on the chemistry of phospholipids with example (6)
b. What are the types of RNA? Explain their role in protein synthesis (8)
c. What are the variants of DNA? Highlight the difference between variants. (6)
7. a. Elaborate on the role and requirement of two nutrients for sports persons in three different games. (10)
b. What are the nutritional disorders associated with liver? Explain the measures to correct them. (10)

OR
8. a. Write the nutrition maintenance followed in diabetic patients. (6)
b. Elaborate on three major problems of malnutrition in our country. (6)
c. Describe the concept of ageing and comment on the nutritional factors that can delay the ageing process. (8)
9. a. Write an essay on sources, nutritional value, requirements and deficiency of Vitamin A (10)
b. Give the reasons for loss of vitamins in foods. (5)
c. Describe the chemistry and stability of vitamin B2 (5)