

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Winter 2018 - 19 Examination

Semester: 1
Subject Code: 203116103
Subject Name: Biochemistry & Human Nutrition

Date: 13/12/2018
Time: 02:00 pm to 04:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (All are compulsory) (Each of one mark) (15)

1. Fats are abundantly found in
 - a. Reproductive tissue
 - b. Creatine kinase
 - c. Both a and b
 - d. None of the above
2. Amino acids are known as
 - a. Energy molecules
 - b. Positive ions
 - c. Zwitter ion
 - d. Negative ions
3. Which is a water-soluble vitamin?
 - a. C
 - b. B
 - c. Both (a) and (b)
 - d. None of the above
4. Live microbial feed supplement is known as
 - a. flavor enhancer
 - b. Probiotics
 - c. coloring agent
 - d. curing agent
5. TCA cycle starts in which organelles?
 - a. mitochondria
 - b. cytoplasm
 - c. Golgi body
 - d. Both a & b
6. _____ are biological catalysts produced by living cells.
7. Amino acids that are synthesized in our body and so they are known as _____.
8. _____ are multiple forms of the enzyme that have the same catalytic activity.
9. _____ is the energy currency of the cell.
10. A _____ diet is one that gives your body the nutrients it needs to function correctly.
11. What is the composition of milk?
12. Name the bond which joins the amino acids.
13. Write full form of RNA.
14. Give one example of artificial sweetener used in food.
15. What do you called a nuclide with an unbalanced and unstable nucleus?

Q.2 Answer the following questions. (Attempt any three) (15)

- A) Describe isoenzyme in detail.
- B) Write down difference between oil & fats.
- C) Write a note on the concept of balanced diet.
- D) Define Vitamins. Explain the functions of fat-soluble vitamins.

Q.3 A) Explain structure of protein. (07)

- B) Define immobilized enzymes. Explain different methods of immobilization. (08)

OR

- B) What are preservatives and colouring agents? Explain it in detail. (08)

Q.4 A) Draw the diagram of TCA cycle with proper labeling. (07)**OR**

- A) What cultured dairy products means? Explain butter and yogurt in details. (07)

- B) What are the factors affecting the digestion process? (08)