

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Food Technology) (Sem.-4)

FOOD BIOCHEMISTRY

Subject Code : BTFT 221-19

M.Code : 79975

Date of Examination : 02-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What do you understand by '*free water*'?
- b) Define the concept of '*Basal Metabolic Rate (BMR)*'.
- c) What is the basic difference between oils and fats?
- d) What are anomers? Give example.
- e) What do you understand by '*assimilation*'?
- f) Define '*ketosis*'.
- g) What are the functions of iron and magnesium in human body.
- h) What are heteropolysaccharides? Give examples.
- i) What do you understand by '*Polenske value*'?
- j) Write down the biological functions of vitamins.

SECTION-B

2. Write a short note on the basic food groups along with suitable examples.
3. Discuss the role of biochemistry in food processing sector.
4. Write down the brief note on the following :
 - (i) PUFA
 - (ii) Hormones
5. Write a short note on gluconeogenesis and glycogen metabolism.
6. Describe the properties and health benefits of antioxidants.

SECTION-C

7. Define enzymes. Write their importance in food biochemistry. Discuss in detail the enzyme kinetics and mechanism of enzyme action.
8. What are lipids? Discuss in detail the classification and functions of lipids along with their physical and chemical properties.
9. Write a detailed note on water soluble vitamins along with their sources and functions.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.