

Roll No. Total No. of Pages: 02

Total No. of Questions: 18

B.Tech. (Food Technology) (2018 Batch) (Sem.-3)

FOOD CHEMISTRY

Subject Code: BTFT-302 M.Code: 76990

Time: 3 Hrs. Max. Marks: 60

## **INSTRUCTIONS TO CANDIDATES:**

- 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**

# Write briefly:

- 1. Enlist any two essential amino acids along with their functions.
- 2. Define Dietary Fibers.
- 3. What do you understand by the term 'flavor reversion'?
- 4. What is the basic difference between oils and fats?
- 5. Define Food Chemistry.
- 6. What are the pectic substances?
- 7. What do you understand by 'Browning'?
- 8. Write down the functions of iron and magnesium in human body.
- 9. Define Pigments along with suitable examples.
- 10. Write down the biological functions of vitamins.

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### **SECTION-B**

- 11. Write short note on enzymatic browning along with suitable examples.
- 12. What is water activity? Explain its role in the preservation of foods.
- 13. Write down the structure and functions of following:
  - a) Starch
  - b) Lactose
- 14. Write a short note on the gel formation theories during protein denaturation.
- 15. Describe the structure and properties of anthocyanins.

### **SECITON-C**

- 16. Define Minerals. Enlist different types of minerals. Discuss in detail the sources, functions and deficiency diseases of minerals.
- 17. What are lipids? Discuss in detail the classification of lipids along with their physical and chemical properties.
- 18. What is starch? Draw its structure. Also explain the process and role of starch gelatinization in food processing.

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.

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