| Reg. No. : |  |  |  |  |  |  |  |  |  |  |  |
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## **Question Paper Code: U9D77S**

## B.E./B.Tech. DEGREE EXAMINATION, NOV 2024

## Open Elective

## 21UBT977 FOOD AND DIARY TECHNOLOGY

(Common to all Engineering branches)

(Regulations 2021)

| Duration: Three hours                       |      |  | Maximum: 100 Marks |  |  |
|---|------|--|--------------------|--|--|
| Answer All Questions                        |      |  |                    |  |  |
| PART A - $(10 \times 2 = 20 \text{ Marks})$ |      |  |                    |  |  |
| 1.  | Wha  | at is the need of food processing?   | CO1 U              |  |  |
| 2.  | Wha  | at are antioxidants?   | CO1 U              |  |  |
| 3.  | Def  | ine Food additives.  | CO1 U              |  |  |
| 4.  | Wha  | at are the types of Carotenoids?   | CO1 U              |  |  |
| 5.  | Def  | ine cleaning process?  | CO1 U              |  |  |
| 6.  | List | any five dairy products commercially available in the market?  | CO1 U              |  |  |
| 7.  | Wha  | at is food spoilage?   | CO1 U              |  |  |
| 8.  | Nan  | ne the organisms, which are responsible for food spoilage.   | CO1 U              |  |  |
| 9.  | List | out major sources of bacterial contamination of milk.  | CO1 U              |  |  |
| 10.   | Hov  | v do you remove contaminants from food?  | CO2 App            |  |  |
|   |      | PART – B (5 x 16= 80 Marks)  |                    |  |  |
| 11.   | (a)  | Elaborate the food regulation guidelines followed in India.  | CO1 U (16)         |  |  |
|   | (b)  | Or Explain the process of determination of water content present i   | in CO1 U (16)      |  |  |
|   | (0)  | edible product?  | n                  |  |  |
| 12.   | (a)  | Articulate the functional properties of food and role of carbohydrate, protein, lipid and vitamins in contributing texture | CO2 App (16)       |  |  |
|   |      | characteristics  |                    |  |  |

|     | (b) | FSSAI is the regulatory body for all the edible products in India. Enumerate the significance and importance of FSSAI  | CO2 App | (16) |
|-----|-----|--|---------|------|
| 13. | (a) | Oil and water both are immiscible in nature but we combine both to get a creamy product by process called emulsification? Examine the methodologies and mechanism happens to exemplify emulsification? | CO2 App | (16) |
|     |     | Or   |         |      |
|     | (b) | Sugar and salts are commercially available as crystals and we have consumed at least once in a day? Outline the detailed methodology of crystallization and its significance?                          | CO2 App | (16) |
| 14. | (a) | Bring your understanding about the technologies deployed to perform food packaging in current generation?  Or  | CO1 U   | (16) |
|     | (b) | Give a detailed account about thermal destruction of food spoiling microorganism?  | CO1 U   | (16) |
| 15. | (a) | The processing methodologies can decide the type of milk? Bring your understanding about milk processing technologies with significance in detailed manner?  Or  | CO1 U   | (16) |
|     | (b) | Explain the Acts and Laws to milk based products under the   | CO1 U   | (16) |
|     | (b) | regulation of FSSAI?   | COLU    | (16) |