

2023

**DFET410: PROFESSIONAL PRACTICE-II**

Full Marks: 100

Time: Three hours

*The figures in the margin indicate full marks for the questions.*

**Question no.1 is compulsory and attempt any four questions from questions no. 2 to 7.**

1. **A. Choose the correct answer.** 1x5
- a) 1. Which of these is not a lipid?
- A) Fats B) Oils  
C) Proteins D) Waxes
- b) A substance intentionally added that preserves flavour and improves taste is called \_\_\_\_.
- A) Food additive B) Food adulterant  
C) Food contaminant D) Food material
- c) The general formula of carbohydrate is
- A)  $(C_4H_2O)_n$  B)  $(CH_2O)_n$   
C)  $(C_6H_2O)_n$  D)  $(C_2H_2O)_n COOH$
- d) Which types of bonds are found in fats?
- A) Amide B) Glycosidic  
C) Ester D) Hydrogen bond
- e) Albumin is the protein of \_\_\_\_.
- A) Milk B) Egg  
C) Meat D) Wheat
- B. Write True or false** 10
- i) A monosaccharide is a monomer of protein.
- ii) Moisture content refers to the amount of water vapor and other volatile components present in a sample.
- iii) Polysaccharides may be linear or branched.

- iv) Cellulose serves as animal starch.
- v) Glycine is the simplest amino acid.
- vi) Acidity can be supplemented by use of citric, tartaric or malic acid.
- vii) Shelf life of food is defined as the length of time a food will retain its quality and safety.
- viii) Hydrometers help in determining the specific gravity of material.
- ix) Aw increases with the decrease of temperature.
- x) Isoamyl acetate is an artificial flavouring agent.

**C Fill in the blanks.**

1x5

- a) Peptide bond is present in \_\_\_\_\_.
  - b) Beri beri is the deficiency disease of \_\_\_\_\_.
  - c) Micro-Kjeldhal method is used for nutrient analysis of \_\_\_\_\_.
  - d) The reaction between protein and sugar is known \_\_\_\_\_.
  - e) Water activity of pure water is \_\_\_\_\_.
2. a) Suggest some measures to avoid wastage of huge agricultural produce. 10
  - b) Explain the positive impacts of food manufacturing technologies on society. 10
  3. a) What is food Innovation and why food innovation is important? 10
  - b) Write a brief notes on (any two): 2x5
    - i) Autoclave      ii) pH meter      iii) Muffle furnace
  4. a) Write the major challenges for the food and beverages industry? 10
  - b) As an entrepreneur, how will you promote your food product? 10
  5. a) Explain in brief the negative impacts of food manufacturing technologies on the environment. 10
  - b) What does biodegradable packaging mean? What are the benefits of biodegradable packaging? 10
  6. a) With the help of flow chart write the production and manufacturing steps of any food product. 12
  - b) What is organic food? Explain in brief about consumer's preference towards organic food products. 8
  7. a) What, according to you, is the most essential skill of a food technologist? 10
  - b) Explain in brief the different sectors of food producing industry. 10