B.Voc Even Semester Examination, 2025

FOOD PROCESSING

Course No.: BVAF-201
(Food Analysis)

Full Marks: 70
Pass Marks: 28

Time: 3 hours

Note: 1. Attempt any one question from each unit.
2. Begin each answer in a new page
3. Answer parts of a question at a place
4. Assume reasonable data wherever required
5. The figures in the right margin indicate full marks for the question

UNIT-I

1. (a) What is carbohydrate? Explain briefly the types of carbohydrate. 7

   (b) What is food preservation technique? Enlist some of the food preservatives. 7

2. (a) What is water activity? Briefly explain the Karl Fischer Titration methods with neat diagram. 7

   (b) What is moisture content? Explain the classification of analytical methods of moisture determination. 7

UNIT-II

3. (a) What is sensory evaluation? Why is sensory evaluation important? 7

(b) Briefly explain the fair testing in sensory. 7

4. (a) Write the short notes on (any two)

(i) Specific gravity

(ii) Specific heat capacity

(iii) Surface tension 10

(b) Briefly explain the viscosity and refractive index. 4

UNIT-III

5. (a) What is protein? Enlist the different types of protein. 7

(b) Write the short notes on (any one)

(i) Dumas combustion method

(ii) Direct solvent extraction method 7

6. (a) What are the criteria for selecting an appropriate instrumental technique? 12

(b) List the different instrumental techniques in food analysis. 2

UNIT-IV

7. (a) What is DSC? Write the application of DSC in food processing. 7

(b) Write the short notes on Nuclear Magnetic Resonance Spectroscopy (NMR). 7

8. (a) What is HPLC? Write the characteristics features of HPLC. 10

(b) Write the application of gas chromatography. 4

UNIT-V

9. (a) Write the short notes (any two)

i. Food Corporation of India (FCI)

ii. AGMARK

iii. FSSAI 7

(b) Write the principles of HACCP implementation. 7

10. (a) Define RM value? Briefly discuss its method of determination? 7

(b) What is saponification value? Briefly explain the test which performs to evaluate the rancidity in oil? 7

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