Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   **Total No. of Pages : 02**

Total No. of Questions : 09

B.Sc. - Honours (Food Technology) (Sem.–1)
INTRODUCTION TO FOOD SCIENCE
Subject Code : BSFT111-21

M.Code : 91382

Date of Examination : 14-01-23

Time : 3 Hrs.   **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **Section-A is compulsory. It consists of SIX short answer questions of TWO marks each.**
2. **SECTIONS-B consists of FOUR Sub-sections : Units-I, II, III & IV.**
3. **Each Sub-section contains TWO questions each, carrying TEWLVE marks each.**
4. **Student has to attempt any ONE question from each Sub-section.**

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SECTION-A

1. **Discuss Briefly :**

    a. Intermediate moisture food

    b. Water activity

    c. Grading of eggs

    d. Climacteric fruits

    e. Functional foods

    f. GM Foods

SECTION-B

UNIT-I

2. a) Explain the different functions of major and minor nutrients with the example and their calorific/energy values.   6

    b) What do understand by proximate analysis?   4

    c) What do you understand by food engineering and food technology?   2

3. a) What is the difference between the physical and chemical properties of ice and water, elaborate with their structure. 6

   b) Define water activity and relate the water activity of food to the shelf life of food with their further classification related to water activity? 6

UNIT-II

4. Discuss the processing methods used for the processing of pulses related to the anti-nutritional factors, and explain three processing methods in detail. 12

5. a) What do you understand by food dispersion, write the different types of food dispersion in food science. 4

   b) Write the nutritive composition of wheat, name the storage protein and name the two different components of which protein is made up? 4

   c) Draw the structure of wheat. 4

UNIT-III

6. a) What do understand by lipids and write the different functions possess by lipids? 6

   b) What do you understand by spice and herbs, give an example of each. 6

7. a) Write the classification of fruits with examples? 4

   b) Difference between climacteric and non-climacteric fruits? 4

   c) Write the different classifications of vegetables with examples? 4

UNIT-IV

8. a) Write the nutritive composition of the egg and draw the structure of the egg? 6

   b) Explain the different parameters to assess the internal and external quality of eggs? 6

9. a) Write the nutritive composition of meat. Also, differentiate between red and white meat with examples? 6

   b) Write the nutritive values of fish. What are the different classifications of fishes with examples? 6

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