Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Nutrition and Dietetics) (Sem.–2)

FOOD CHEMISTRY

Subject Code : BSND-123-18

M.Code : 77757

Date of Examination : 08-07-22

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **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

1. Answer briefly :

a) Write about water type present in food system.

b) Write relationship of water activity with food shelf life.

c) What is simple lipid? Draw its structure.

d) Write definition of refractive index, specific gravity and peroxide value.

e) Write about taste perceptions by tongue.

f) Define hydrogenation and inter-esterification.

g) Draw primary structure of protein.

h) What is amphoterism in protein?

i) Draw structure of glucose and sucrose.

j) Draw structure of vitamin A and its rich sources.

SECTION-B

2. Explain the phenomenon of sorption isotherm. (5)

3. Define Iodine value, Peroxide value and Saponification value and their purpose of determination. (5)

4. What is Electrophoresis? Explain its method of analysis. (5)

5. a) Draw structure of any two homo polysaccharides and their applications. (3)

   b) Write a note on flavor enhancers. (2)

6. Name various qualitative tests used to check the presence of carbohydrates. Explain any two. (5)

SECTION-C

7. a) Write about existence of different water systems in food and their role in food processing. (5)

   b) Write the purpose of melting point, softening point and specific gravity determination of fats and oils and write complete procedure of anyone. (5)

8. a) What is sedimentation value of protein? How it is determined? (4)

   b) Write about protein functional properties. How we determine the organoleptic characteristics of protein. (6)

9. a) Write about mono-, oligo- and poly saccharides with examples. Write their requirements as human nutrients. Draw structure of any two disaccharides. (2+2+1)

   b) Write importance of vitamins. What are different water soluble vitamins? Write function of any two of them. (5)

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.