

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 1781

GC-3

Your Roll No.....

Unique Paper Code : 32201102

Name of the Paper : Principles of Food Science

Name of the Course : **B.Sc. (H) Food Technology**

Semester : I

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. All questions carry equal marks.
3. Question No. 1 is compulsory.
4. Attempt any **FIVE** questions in all.

1. (i) Explain following briefly : (2×5)

(a) IMF

(b) Break point chlorination

(c) Polystyrene

(d) Threshold Value

(e) Electroporation

(ii) What is hurdle technology ? Discuss its application in food. (5)

2. (a) Growth of microorganism is affected by moisture content and pH of food. Justify. (4+4)

P.T.O.

- (b) Discuss the principle and applications of Non-thermal methods of minimal processing. (7)
3. (a) What is aseptic packaging ? Explain the properties of PET. (4+4)
- (b) Explain the classification of food dispersion and its application in food industries. (7)
4. Differentiate between **(Any three)** : (5×3)
- (a) True solution and colloidal solution
- (b) Affective test and Analytical Test
- (c) Ethylene vinyl alcohol and Ethylene vinyl acetate
- (d) Temporary hardness and Permanent hardness of water
5. (a) Give detailed description of formation, stability and characteristics of food foams. (8)
- (b) Define texture and explain the Szczniak classification of food texture. (2+5)
6. (a) What is HPP ? Explain its process cycle and equipment. (7)
- (b) Discuss the milk plant sanitation. (8)
7. Write short note on **(Any five)** : (5×3)
- (a) HLB
- (b) Advantages of Ohmic heating.
- (c) Characteristics of sols
- (d) Sanitizers used in food industry
- (e) Necessary attributes to become a sensory panel member
- (f) BOD