

M.Sc. Part-I Examination, 2013

**DIETETICS AND COMMUNITY NUTRITION
MANAGEMENT**

PAPER — III (Unit-5)

Full Marks : 50

Time : 2 hours

Answer Q. No. 1 and any four from the rest

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

1. Answer any five of the following : 2 × 5

(a) What do you mean by biopreservation of food.

(b) Mention the names of artificial food additives.

(c) What are the goals for food preservation ?

(Turn Over)

(d) Write the importance of thermal processing during food processing.

(e) Briefly explain the irradiation of food ?

(f) Specify the names of few preservative chemicals.

(g) In which food processing the Hurdle technology is used ?

(h) Define fortification of food.

2. (a) Discuss the chemical aspect of food safety.

(b) What is high pressure food preservation ?

(c) Define pulsed electric field electroporation. 5 + 3 + 2

3. (a) Explain perishability of food.

(b) Explain the role of natural food enzymes in case of food spoilage.

(c) What is curing ? 4 + 4 + 2

4. (a) Classify and explain the different types of dehydration techniques regarding the purpose of food preservation.

(b) What are sequestrants ?

(c) Explain the importance of smoking in food preservation. 5 + 2 + 3

5. (a) Classify food on the basis of preservation.

(b) Write the steps adopted for oilseeds preservation.

(c) What do you mean by osmotic drying ? 5 + 3 + 2

6. (a) Specify the names of heat resistant bacteria.

(b) What do you mean by blanching of food ?

(c) Describe the cold processing temperature reduction method for food storage. 3 + 2 + 5

7. (a) Write the nutritive values of cereals and pulses.

(b) Discuss their preservation technique.

(c) Write the role of organic acids as preservatives. $3 + 5 + 2$

8. (a) State the differences between refrigeration and freezing.

(b) Discuss the mechanism of food preservation by freezing.

(c) Why cryo-preservation is prefer over heat drying in case of palatable food stuffs. $2 + 5 + 3$

9. (a) How modified atmosphere can affect the food preservation ?

(b) Briefly describe the canning and bottling technique during food storage.

(c) Write the effect of food processing on lipids. $3 + 4 + 3$