

2015

M.Sc. Part-I Examination

DIETETICS AND COMMUNITY NUTRITION MANAGEMENT

PAPER—III (Unit-5)

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

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

Illustrate the answers wherever necessary.

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

1. Answer any 'five' questions from the following : 5×2

- (a) What is meant by 'Water activity'?
- (b) Explain the effects of drying upon microorganisms.
- (c) Write the full form of ERH. How can you measure it?
- (d) Name any two anthocyanides.

(Turn Over)

- (e) Mention the importance of sterilization during food processing.
- (f) What do you mean by 'unsound meat'?
- (g) What are the basic differences between roasting and frying?
- (h) What are salting and pickling?

2. (a) Define food processing.

(b) What are the different methods used in food processing?

(c) What is curing of meats? 3+5+2

3. (a) What is food irradiation?

(b) Write the advantages and disadvantages of food irradiation.

(c) Briefly explain the shrinkage of food materials during drying.

$$2 + (2\frac{1}{2} + 2\frac{1}{2}) + 3$$

4. (a) Describe the different preservation techniques used during food processing.

(b) What are the health related problems caused during curing of meat by nitrate?

(c) What do you mean by fluidized-bed-drying?

5+5+2

5. (a) Write the basic objectives of food processing operation.

(b) Describe the mechanism by which water exerts its protective effects in foods.

(c) Classify freezing technique of foods. 2+5+3

6. (a) Write the storage stability of frozen foods.

(b) What are the effects of freezing upon microorganisms?

(c) What do you mean by cryogenic freezing? 2+5+3

7. (a) Schematically explain the procedure for fish processing.

(b) Why enzymatic treatment is necessary for meat processing?

(c) What is condensed milk?

(d) What is vat method for the preservation of milk?

4+2+2+2

8. (a) What are the chemical preservatives used in food processing?
- (b) 'Safety during food handling is most important part of food processing' — Why?
- (c) Mention the different pigments used in fruits.
- 4+4+2
9. (a) What do you mean by Radappertization?
- (b) Describe the preparation of intermediate moisture food (IMF).
- (c) What are the characteristics of radiations of interest in food preservation?
- 2+4+4