## M.Sc.

## 2016

# 4th Semester Examination

## NUTRITION & DIETETICS

PAPER-NUD-401

Full Marks: 40

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.

#### Module-I

- 1. Answer any five questions of the following:  $5 \times 1$ 
  - (a) What is cryogenic freezing?
  - (b) What are the changes noted in food items preserved under radiation?
  - (c) Mention the effects of freezing upon microorganisms.
  - (d) What are the critical factors for food preservation?
  - (e) What is 'spray drying'?
  - (f) Write the fullform of IMF and ERH.

- (g) Write the name of flavour active compounds.
- (h) What are chemical preservative,?
- 2. (a) Briefly describe the importance of food preservation.
  - (b) Write the mechanism of food preservation through freezing.
  - (c) Write the process of pre-freezing treatment of leafy vegetables and fruits. 2+3+3

Or

- (a) Discuss the basis principles adopted in food micropreservation.
- (b) Write the names of driers used for food preservation in dehydration process.
- (c) Describe the principle underlying the destruction of micro organism by radiation. 3+3+2
- 3. (a) Describe the chemical preservation of food stuffs with special reference to sugar and salt.
  - (b) State what do you known about the safe handling of food. What is safety for food handling? Discuss which steps should be considered for safety of food at the time of handling.
    3+(1+3)

- (a) Describe the chemical changes in foods that effect on flavour and colour of foods.
- (b) Describe the mechanism of dehydration induced food preservation.
- (c) What is fluidized—bed freezing? 3+3+1

### Module-II

- **4.** Answer any five questions of the following:  $5 \times 1$ 
  - (a) Write the proximate principles of milk.
  - (b) How you minimized the undesirable oxidative changes in fish?
  - (c) What are food additives?
  - (d) What do you mean by Municipal solid Waste?
  - (e) What is Biomedical Waste?
  - (f) What is Sewage treatment?
  - (g) What do you mean by alcoholic fermentation?
  - (h) Write the beneficial role of Yogurt.
- 5. (a) Discuss the various methods of Pasteurization of milk.

- (b) Describe the methods adopted for fish preservation.
- (c) Write a brief note on fermented milk product.

Or

- (a) Mention the nutritive value of egg.
- (b) What are the egg products? How can you test the fresh egg?
- (c) Describe a method of processing of Vegetables with mentioning the advantages and disadvantages.

  2+(1+2)+3
- 6. (a) Briefly describe the steps of waste disposal.
  - (b) Write the colour coding of bag in hospitals to disposeoff different biomedical waste.
  - (c) What is human anatomical waste? 4+2+1

Or

- (a) Write a note on 'curd and cheese fermentation'.
- (b) Briefly describe the role of yeast in fermentation technology.
- (c) What is mould fermentation?