Name : .....

Roll No. : .....

Invigilator's Signature : .....

CS/BHSM/SEM-1/HPM-107/2012-13

2012
NUTRITION AND FOOD SCIENCE

Time Allotted : 3 Hours *Full Marks* : 70

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

GROUP – A
(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $10 \times 1 = 10$

   i) Thiamine containing coenzyme is
      a) FAD b) NAD
      c) TPP d) PALPO.

   ii) Beriberi occurs due to deficiency of
      a) Ascorbic acid b) Niacin
      c) Thiamine d) Riboflavin.

   iii) Most limiting amino acid in pulses is
      a) Leucine b) Lysine
      c) Methionine d) Valine.

   iv) The reproductive process of yeast is termed as
      a) Binary fission b) Budding
      c) Sporulation d) None of these.

v) The largest component of daily energy demand is

a) Physical activity b) Basal metabolic rate

c) Thermogenesis d) None of these.

vi) Vegetable oils contain no

a) Cholesterol b) Triglyceride

c) Fatty acids d) Glycerol.

vii) Richest plant source of protein is

a) Saya bean b) Rajmah

c) Red gram dal d) Lentil.

viii) Most abundant intracellular mineral is

a) Sodium b) Potassium

c) Calcium d) Iron.

ix) Daily requirement of calcium for a non-pregnant non-lactating normal adult woman is

a) 400 mg b) 600 mg

c) 800 mg d) 1000 mg.

x) Permitted yellow colour for food is

a) Metanil yellow b) Sunset yellow

c) Rhodamin - B d) All of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Write short notes on any three from the following.

a) Pasteurization

b) HACCP

c) Essential amino acids

d) Protein Energy Malnutrition

e) Cryogenic freezing

f) Mutual supplementation.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

3. Define and Classify vitamin. Write in detail the function of vitamin *A* and *C*. 2 + 5 + 8

4. Define food borne disease. How food borne diseases are classified ? Enlist few preventive measures to inhibit the multiplication of micro-organisms in food. 2 + 5 + 8

5. Write down four important food sources of iron. What are the functions of iron in the body ? Critically discuss the effect of deficient and excess intake of iron. 2 + 8 + 5

6. What are the common sources of food contamination ? Discuss the factors that affect the growth of micro-organisms in food. 3 + 12

7. Classify carbohydrates. What are the functions of carbohydrate in the body. Critically discuss the effect of low and high carbohydrate intake. 3 + 7 + 5

8. What is food adulteration ? Write down one simple test for the determination of a common adulterant in milk, ghee, laddoo, mustard seeds. Briefly discuss the functioning of Food Safety and Standards Authority of India. 2 + 8 + 5