KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Ag) 2005 Admission VI Semester Final Examination
October 2008

HMSc 3201
Human Food and Nutrition (1+1)

Max. Marks: 60
Time: 2 hours

Section - A

I Answer all the questions   [20 x 0.5 = 10 marks]

Fill in the blanks

1. Dried pulses are rich in protein containing _____ per cent.

2. Fruits in general are good sources of _____.

3. _____ and _____ are good sources of carotene.

Choose the correct answer

4. The blood of normal person contains _____ of glucose per 100ml
    a) 80 to 100mg   b) 50 to 80mg   c) 100 to 120mg   d) 120 to 140mg

5. In normal human subjects adipose tissue constitutes _____ of the body
    a) 10 – 20 %   b) 10- 15 %   c) 5 – 15 %   d) 15 - 20 %

6. The proteolytic enzyme present in gastric juice is called
    a) Trypsin   b) Chymotrypsin   c) Pepsin   d) Renin

7. The deficiency of protein and calorie
    a) Marasmus   b)Kwashiorkor   c) Goitre   d) Scurvy

8. Energy value of foods is determined using
    a) Respirometer   b)Bomb Calorimeter
    c) Benedict and Roth Apparatus   d) Planimeter

9. Kesari dhal contain _____ toxic compound
    a) BOAA   b) Cyanogens   c) Goitrogens   d) None of the above.

10. _____ and _____ are important elements present within body fluids.
    a) Sodim, Potassium   b) Calcium, Magnesium
    c) Iron, Phosphorus   d) Zinc, Copper.

11. The permitted level of fluoride in water
    a) 2.0 ppm   b) 3.0 ppm   c) 4.0 ppm   d) 1.0 ppm

12. One K.cal equals
    a) 4.184 joule b) 4.184 kilo joule   c) 4.184 mega joule   d) 4.0 kg

State True or False

13. The thiamine requirements are directly related to calorie requirements.

14. Foods rich in proteins are called protective foods.

15. Obesity is a condition in which the individual is overweight.

16. Rich source of vitamin-B_6 are roots and tubers.

17. Wet Beriberi is a clinical deficiency of thiamine.

18. Vitamin K is essential for blood coagulation.

19. Milk is a good source of Vitamin D.

20. Extra vitamins and minerals are usually added to macroni products to allow for losses during cooking.

Section – B

II) Answer all questions (Answer in one or two sentences)   **6 x 1 = 6 Marks**

1. Define Nutrition
2. What is meant by nutrient?
3. Define Health
4. What is meant by overnutrition? Give example.
5. Causes of obesity
6. Symptoms of iron deficiency anaemia

Section – C

III) Answer any six questions (Answer in few sentences)   **6 x 2 = 12 Marks**

1. Distinguish good nutrition and bad nutrition
2. Food habits on regional variation
3. How the government nutrition policy can solve the iron deficiency
4. Clinical symptoms of vitamin C
5. Etiological agents of Atherosclerosis
6. List the enzymes involved in the digestion of proteins
7. Distinguish essential and non-essential aminoacids.
8. Botulism – causative agent and symptoms of infection.

Section – D

IV) Answer any four questions (paragraph answers)   **4 x 3 = 12 Marks**

1. Functional classification of foods
2. Impact of good nutrition on national development
3. Protein – calorie malnutrition
4. Symptoms of vitamin A deficiencies.
5. Role of Dietary fibre
6. Food fortification and food enrichment

Section – E

V) Answer any four questions (Essay type answers)   **4 x 5 = 20 Marks**

1. Explain the role of Agricultural Scientists and Food Technologists on Meeting National Nutrition Requirements.
2. Explain the Nutrition requirements during pregnancy
3. Explain about the physiological changes in ageing process.
4. Role of International agencies in improving the nutritional status of the population – Explain.
5. Explain about endemic Goitre and Osteoporosis