

KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Ag) 2006 Admission VI Semester Final Examination
July / August 2009

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. The saliva contains an alpha amylase called _____.
2. Maltose $\xrightarrow{\text{maltase}}$ _____
3. Foods rich in carbohydrate and fats are called _____ foods.

Choose the correct answer

4. Rice contains _____ protein than wheat and other cereals.
a) Less b) More c) Adequate d) Inadequate
5. Raw egg white contains _____ anti-nutritional factor.
a) Tannin b) Lectin
c) Pepsin d) Avidin
6. Osteomalacia is widely prevalent among _____.
a) Expectants b) Nursing c) School children d) Old people.
7. Dryness of eye membrane is _____.
a) Xerophthalmia b) Bitot's spot c) Keratomalacia d) Night blindness
8. Typhoid is caused by _____.
a) Salmonella b) Bacilli c) Clostridium d) Staphylococci
9. Groundnut is infected with _____.
a) Aspergillus b) Fusarium c) Claviceps d) Penicillium.
10. *Clostridium perfringens* is an _____ forming heat resistant spores.
a) Anaerobe b) Aerobe c) Thermophillic d) Non-thermophillic.
11. *Clostridium botulinus* toxins are present in _____.
a) Meat and fish b) Corn and groundnut
c) Cereals and millets d) Pork and pork products
12. Ragi contains rich source of _____.
a) Calcium b) Potassium c) Phosphorus d) Sodium
13. Fats are essential for absorption of _____.
a) Fat soluble vitamins b) Water soluble vitamins
c) Carbohydrates d) Proteins

State True or False

14. Lysine is an essential fatty acid.
15. Sucrose is readily hydrolysed in the intestine.
16. Females have slightly lower BMR than males.
17. Fatty acids obtained by hydrolysis are oxidized to CO₂ and H₂O
18. Cardiovascular disease comprises diseases of heart.
19. Absorption of amino acids takes place in the large intestine.
20. The total iron content of normal adult man is estimated to be about 4.0 to 5.0g.

Section – B

II

Answer all questions (Answer in one or two sentences)

6 x 1 = 6 Marks

1. Expand NIN
2. What is meant by food fortification?
3. What is meant by food hygiene?
4. Any two functions of food
5. Calorific value of one gram of protein and one gram of fat
6. What is the protein requirement for a school going child?

Section – C

III

Answer any six questions (Answer in few sentences)

6 x 2 = 12 Marks

1. Typhoid and Paratyphoid – causes and symptoms
2. Digestion process of carbohydrate – outline
3. Body needs of vitamin D met by different sources – Justify
4. Formulate a balanced diet at high cost for preschool children
5. List the deficiencies occurring in the diets of school children in developing countries.
6. Nutrient content of any two cereals.
7. Two principles of treatment for atherosclerosis
8. What is the percentage of calorie to be supplied by carbohydrates, fats and proteins to an adult obese diabetic person.

Section – D

IV

Answer any four questions (paragraph answers)

4 x 3 = 12 Marks

1. Trend on food production – cereals and pulses in India – Explain
2. How will you measure the calorific value of food?
3. Factors influencing the total energy requirement of body
4. Briefly write on deficiency disorder of Niacin.
5. Predisposing factors of Diabetes Mellitus.

Section – E

V

Answer any four questions (Essay type answers)

4 x 5 = 20 Marks

1. How will you formulate a balanced diet for a preschool child. Give a sample menu.
2. Explain about fluorosis and vitamin A deficiency
3. Explain the nutrition requirements during lactation.
4. Explain on Food borne Infection.
5. Explain the role of water in human body.