

BSc (Hons) FNS Sem.-3 (NEP) Examination

DSC_C_231_T

Principles of Human Nutrition

December-2024

Time : 2-00 Hours]

[Max. Marks : 50

Question 1 Write the following

- (i) Define RDA. Explain the principles of deriving RDA in detail. (5 Marks)
- (ii) what are functions of water in our body? explain the distribution of water in the body. (5 Marks)

OR

- (i) Define reference man and reference women. Explain RDA of macronutrients. (5 Marks)
- (ii) Describe the process of water balance in the body. (5 Marks)

Question 2 Write the following

- (i) Explain the functions of carbohydrates in detail. (5 Marks)
- (ii) Explain sources & properties of Dietary fibre. (5 Marks)

OR

- (i) Write a note on digestion, absorption & metabolism of fat? (5 Marks)
- (ii) Explain nitrogen balance, protein metabolism & factors affecting it? (5 Marks)

Question 3 Write the following

- (i) Explain the bio-chemical roles of calcium in the human body and discuss the effects of calcium deficiency and excess on physiological functions. (5 Marks)
- (ii) (5 Marks)

OR

- (i) Examine the role of iron in oxygen transport and enzyme function. What are the implications of iron deficiency and overload on human health? (5 Marks)
- (ii) (5 Marks)

Question 4 Write the following

- (i) Explain classification of water soluble vitamins in detail. (5 Marks)
- (ii) Write a detailed note on functions, sources and deficiency caused by Vitamin C. (5 Marks)

OR

(P.T.O)

- (i) Write about one water soluble & one fat soluble vitamin? (5 Marks)
- (ii) Write a detailed note on functions, sources and deficiency caused by Vitamin A. (5 Marks)

Question 5 Attempt any ten out of fifteen

(10 Marks)

- (i) What is spina bifida?
- (ii) What is Wernicke's encephalopathy?
- (iii) Give names of vitamin K plant, animal & synthetic source.
- (iv) Which is the most active form of Vitamin E
- (v) Pellagra is caused due to deficiency of _____.
- (vi) Difference between IDDM & NIDDM.
- (vii) Explain OGTT & glycosuria.
- (viii) Give examples of soluble & non soluble fibres.
- (ix) Write a note on chylomicron?
- (x) What are the dietary sources of calcium?
- (xi) Why is iodine important for thyroid hormone production?
- (xii) What are the symptoms of sodium deficiency ?
- (xiii) define Hyponatremia
- (xiv) what is Interstitial Fluid
- (xv) what is EAR?