D.K.M COLLEGE FOR WOMEN (AUTONOMOUS) VELLORE-1

DEPARTMENT OF FOODS AND NUTRITION

ESSENTIAL OF MICRO NUTRIENTS

Class: II M.Sc **Subject Code: 15CPFN3A**

Unit - I (6 Marks Questions)

1. Write a note on performed water and metabolic water
2. Explain the role of hormones in fluid and water balance
3. Explain in short on factors affecting water balance
4. Write role of sodium and potassium
5. Explain the factor which affects hydrogen ion balance

(15 Marks Questions)

1. Discuss on role and distribution of water in the human body
2. Write a brief note on electrolytes and its absorption, transport and balance
3. Describe the factors affecting electrolyte balance and hydrogen ion balance
4. Explain in detail about role of hormones in water and fluid balance
5. Elaborate the absorption, transport and balance of sodium
6. Elaborate the absorption, transport and balance of potassium
7. Elaborate the maintenance of homeostasis in the body

Unit - II (6 Marks Questions)

1. Write a note on Vitamin -E Chemistry, deficiency and toxicity
2. Explain the physiological action of Vitamin-D
3. Write a note on Vitamin -A digestion, absorption and storage
4. Write a note on Vitamin -K deficiency and toxicity
5. Give the RDA for Vitamin A, D, E and K
6. Give the function of Anti-oxidant (Vitamin –A)

7. Give the interactions of Vitamin E and D
8. Brief note on tocopherol
9. Describe a detail about napthoquinone and its role in agglutination
10. Write a brief note on pro-vitamins and pre-formed vitamins
11. Explain the role of vitamin D and its types
12. Brief a note on vitamin D and its absorption of calcium

(15 Marks Questions)

1. Discuss on the absorption, transportation, storage and excretion of Vitamin –A
2. Elaborate the absorption, transport and balance of chloride
3. Elaborate the maintenance of homeostatis in the body
4. Discuss the interaction of fat soluble vitamins with other nutrients
5. Explain the antioxidant nutrient and functions of vitamin A and E
6. Describe the chemical, functional, physiological action, utilization of fat soluble vitamins
7. Describe the history of fat-soluble vitamins
8. Give a brief note on vitamin A concentration, sources, deficiency and toxicity
9. Give a brief note on vitamin E concentration, sources, deficiency and toxicity
10. Explain the nutrient losses in food preparation during preliminary process in fat soluble vitamins
11. Discuss on the absorption, transportation, storage and excretion of Iron
12. Give a brief note on vitamin D concentration, sources, deficiency and toxicity
13. Discuss on the distribution, functions and deficiency of zinc in human body
14. Give a brief note on vitamin K concentration, sources, deficiency and toxicity

15. Discuss on the absorption, transportation, storage and excretion of Vitamin –E
16. Explain the RDA source, deficiency and toxicity of fat soluble vitamins
17. Discuss on interaction of vitamin A and D on other nutrients

Unit - III (6 Marks Questions)

1. Explain the distribution, sources and importance of Vitamin B12
2. Explain the interaction of water soluble vitamins with other nutrients
3. Write a brief note on riboflavin
4. Give a brief note on pyridoxine
5. Give a brief note on Vitamin B5
6. Explain in details on sources and deficiencies of water soluble vitamins
7. Explain the role of ascorbic acid in cancer

(15 Marks Questions)

1. Write a brief note on B complex vitamins
2. Write a note on vitamin C- sources, RDA and its deficiency
3. Discuss on preliminary process and water soluble vitamins loss
4. Explain the nutrient losses in food preparation
5. Explain role of vitamin B12 on megaloblastic anemia in detail
6. Discuss on interaction of water soluble vitamins with other nutrients
7. Describe the chemical, functional, physiological actions and utilization of water soluble vitamins
8. Describe the history of water soluble vitamins
9. Give a brief note on folic acid and its effect
10. Write a brief note on thiamine concentration, sources deficiency and toxicity
11. Explain adequate intake and tolerable upper intake levels for fat soluble vitamins

Unit - IV (6 Marks Questions)

1. Explain the interaction of calcium with other nutrients
2. Discuss on the absorption, transportation, storage and excretion of Phosphorous
3. Write a brief note on macro-minerals and its calcium and phosphorous ratio
4. Write a brief on calcium interaction with other nutrients
5. Write a brief note on concentration, sources, deficiencies and toxicity of phosphorous
6. Elaborate the distribution of calcium and phosphorous in human body
7. Write a detail about the general functions of macro- minerals

Unit - IV (15 Marks Questions)

1. Write a brief note on concentration, sources, deficiencies and toxicity of riboflavin
2. Write a brief note on concentration, sources, deficiencies and toxicity of pyridoxine
3. Write a brief note on concentration, sources, deficiencies and toxicity of Vitamin B5
4. Explain the RDA, Sources, deficiency and toxicity of water soluble vitamins
5. Explain the nutrients loess in food preparation
6. Explain Vitamin B12 and Megaloblastic anaemia
7. Elaborate the transport, digestion, absorption and storage of water soluble vitamins
8. Write a brief note on Biotin
9. Explain the role of Ascorbic acid
10. Discuss on the interaction of water soluble vitamins with other nutrients
11. Explain the importance of calcium in the bone formation
12. Draw a diagram on calcium absorption and transport

UNIT-5 (6 Marks Questions)

1. Explain the distribution, sources and importance of iodine
2. Explain the concentration of iron in human body and give its function
3. Explain the sources, deficiency and toxicity of copper
4. Give a short note on Magnesium
5. Give a short note on Copper
6. Give a short note on Manganese
7. Give a short note on Chromium
8. Give a short note on Zinc

(15 Marks Questions)

1. Elaborate the role of iron in prevention of anaemia
2. How the human body meets its fluoride requirements? Give its toxicity
3. Give brief note on iron sources, digestion and transport
4. Differentiate heme and non heme iron
5. Explain the role of iodine in thyroidism
6. Explain the antioxidant properties of selenium
7. Explain the role of magnesium in nervous disorder
8. Write a detail about the general functions of micro nutrients