



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Master's Degree Examination – June 2021
IV Semester

Class : II M.Sc.
Major : Food Science and Nutrition

Time: 3 Hours
Max. Marks: 100

17MFNC21 Micronutrients

PART A
Choose the Correct Answer

10 x 1 = 10

- Relative Dose response is done to assess ----- status
a. Vitamin A b. Vitamin D c. Vitamin E d. Vitamin K CO1 K2
- 7 dehydrocholesterol is synthesised in -----
a. blood b. skin c. liver d. plants CO1 K2
- Carnitine enables ----- to cross the mitochondrial membranes and get oxidised
a. Fatty acid b. amino acid c. glucose d. fructose CO2 K2
- Identify the mineral that contains Vitamin B₁₂
a. Selenium b. copper c. cobalt d. zinc CO2 K2
- An excellent source of magnesium is
a. brown rice b. green leafy vegetables
c. peas d. corn CO3 K1
- _____ decreases iron absorption.
a. Vitamin C b. Sugar c. mucin d. EDTAA CO3 K2
- The mineral _____ exhibits synergistic activity to vitamin E.
a. iron b. copper c. zinc d. selenium CO4 K1
- Wilson's disease is associated with the toxicity of
a. magnesium b. cobalt c. zinc d. copper CO4 K2
- deficiency decreases the synthesis of hepatic glutathione peroxidase
a. Iron b. Vitamin C c. Vitamin B 12 d. Folic acid CO5 K2
- High intake of ----- may affect prothrombin formation.
a. Vitamin A b. Vitamin D c. Vitamin E d. Vitamin C CO5 K2

Part B
Answer ALL questions
Each answer should not exceed 400 words or two pages

5 x 6 = 30

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|---|--------|
| 11.a. Outline the impact of hypervitaminosis A.
(or) | CO1 K4 |
| 11.b. Explain in detail about Wald's cycle. | CO1 K2 |
| 12.a. Recall sources and assessment of folic acid.
(or) | CO2 K1 |
| 12.b. Describe the functions of pyridoxine. | CO2 K2 |
| 13.a. Explain the impact of hypo and hypercalcemia.
(or) | CO3 K2 |
| 13.b. Enumerate the functions of potassium . | CO3 K1 |
| 14.a. Indicate the effects of copper deficiency.
(or) | CO4 K2 |
| 14.b. Describe fluoride toxicity. | CO4 K1 |
| 15.a. Express the interrelationship between vitamin E and selenium.
(or) | CO5 K2 |
| 15.b. Show the relationship between phosphorous and calcium. | CO5 K2 |

Part C
Answer ALL questions
Each answer should not exceed 800 words or four pages

5 x 12 = 60

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|--|--------|
| 16.a. Discuss about the absorption, transport and storage of Vitamin D.
(or) | CO1 K2 |
| 16.b. The Anti xerophthalmic vitamin is indispensable to health. Justify | CO1 K4 |
| 17.a. Elaborate on the role of ascorbic acid as an antioxidant.
(or) | CO2 K3 |
| 17.b. Explain the effects of thiamine deficiency. | CO2 K2 |
| 18.a. Discuss the absorption and utilization of phosphorous.
(or) | CO3 K2 |
| 18.b. Explain the salient aspects of calcium balance. | CO3 K2 |
| 19.a. Describe the absorption and transport of iron.
(or) | CO4 K2 |
| 19.b. Enumerate the salient features of IDD. | CO4 K2 |
| 20.a. Trace the interrelationship between vitamins and minerals with examples.
(or) | CO5 K3 |
| 20.b. Show the interrelationship between any four vitamins. | CO5 K2 |
