



**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 / July 2021**  
**II Semester**

**Class: I PG**  
**Major: Biochemistry**

**Time : 3 Hours**  
**Max Marks : 100**

**20MBCC10 Nutritional Biochemistry**

**Part- A**

**10x 1 = 10**

**Choose the Correct Answer**

1. A common anthropometric measure for infants is CO1K1
  - a. Standing height
  - b. Recumbent Length
  - c. Sitting height
  - d. Laying height
2. Protein energy malnutrition (PEM) refers to a state where the infants dietary intake is insufficient in CO1K1
  - a. Carbohydrates
  - b. Protein
  - c. Overall calories
  - d. Both B and C
3. Vitamin B1 is called CO2K1
  - a. Pyridoxine
  - b. retinol
  - c. Niacin
  - d. Thiamine
4. Which membrane fatty acids are precursors for eicosanoids CO2K3
  - a. C22 and C20 saturated fatty acids
  - b. C20 and C22 polyunsaturated fatty acids
  - c. C20 and C22 monounsaturated fatty acids
  - d. C18 and C22 polyunsaturated fatty acids
- 5 Good sources of carbohydrates are CO2K2
  - a. Fats, oils, butter and margarine
  - b. Fish, eggs, beef, pork and poultry
  - c. Cereals, fruits, vegetables & milk
  - d. Green leafy vegetables, seafood & water
6. Which is the largest and which is the smallest of the lipoprotein family CO2K2
  - a. HDL and LDL
  - b. LDL and HDL
  - c. Chylomicrons and VLDL
  - d. Chylomicrons and HDL
7. Calcium deposition in soft tissues is due to CO3K2
  - a. Deficiency of vitamin D
  - b. Excess of vitamin D
  - c. Deficiency of vitamin C
  - d. Excess of vitamin c
8. Choose the diet recommended for weight maintenance CO4K4
  - a. Low protein and high Glycemic Index
  - c. Low protein and low Glycemic Index
  - b. High protein and high Glycemic Index
  - d. High protein and low Glycemic Index
9. Gluten intolerance is an allergic response to CO5K4
  - a. Rice
  - b. Wheat
  - c. Beans
  - d. Lentils
10. The haemolytic response to the consumption of fava beans is due to CO5K3
  - a. fructose deficiency
  - b. Favism
  - c. Soybeans
  - d. Both a & b

**Part- B**  
**Answer the following**  
**Answer should not exceed 400 words or four pages**

**5×6=30**

- 11.a Explain the diseases associated with protein energy malnutrition (PEM) CO1K2  
(or)
- 11.b Discuss the causes and consequences of bulimia and obesity CO1K3
- 12.a. Write about the best diet for weight loss? CO2K3  
(or)
- 12.b. Write the chief functions of Vitamin B12 in our body? Mention the food sources. CO2K3
- 13.a Discuss about the health problems associated with magnesium and sulfur CO3K2  
deficiency.  
(or)
- 13.b. Write the functions of calcium and phosphorous and its deficiency. CO3K2
- 14.a. Discuss about the nutritional requirements during pregnancy and lactation. CO4K2  
(or)
- 14.b. Write the causes of peptic ulcer. CO4K2
- 15.a Discuss about neurological disorders associated with malnutrition CO4K2  
(or)
- 15.b. Explain about favism. CO5K2

**Part- C**  
**Answer all the questions**  
**Each answer should not exceed 800 words or four pages**

**5X 12 = 60**

- 16.a. Describe in detail about the Anthropometric methods of nutritional assessment. CO1K2  
(or)
- 16.b. Explain the clinical methods and diet surveys for nutritional assessment. CO1K2
- 17.a. Explain the nutritional significance of water soluble and fat soluble vitamins. CO2K2  
(or)
- 17.b. Explain about the nutritional significance of lipids CO2K2
- 18.a. Discuss the adverse effects of protein intake above RDA level CO2K3  
(or)
- 18.b. Explain in detail about the diseases associated with electrolyte imbalance in CO3K3  
human body
- 19.a. Discuss the role of diet and nutrition in prevention and treatment of diseases. CO4K4  
(or)
- 19.b. Describe about the essential nutrients for healthy balanced diet. CO4K2
- 20.a. Explain in detail about naturally occurring food toxicants. CO5K2  
(or)
- 20.b. Discuss about the nutrition-infection interactions and its impact on human health. CO5K4

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