

**2024**

**PHYSIOLOGY — HONOURS**

**Paper : CC-10**

**(Nutrition and Dietetics)**

**Full Marks : 50**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**Group - A**

1. Answer *any five* questions : 2×5
- (a) State the dietary source of iron.
  - (b) What is RDA?
  - (c) What do you mean by 'Protein Sparers'?
  - (d) What is digestibility coefficient?
  - (e) State two metabolic functions of Inositol.
  - (f) What is Refeeding syndrome?
  - (g) State two dietary sources of cyanocobalamin.
  - (h) Write any two functions of folic acid.
  - (i) What do you mean by NPU?
  - (j) What do you mean by hypervitaminosis?

**Group - B**

2. Write short notes on (*any two*) : 5×2
- (a) Benedict Roth Apparatus
  - (b) Dietary requirement of macronutrients
  - (c) Biological functions of Calcium
  - (d) Principles of formulation of balanced diet
  - (e) The Physiological roles of Vitamin K and Biotin.

**Group - C**

**3. Answer *any three* questions :**

- (a) (i) What do you mean by R.Q.? Why the value of R.Q. is decreased in chronic Diabetes mellitus?  
(ii) State the factors influencing R.Q. value.  
(iii) Calculate the R.Q. values of proteins and fats. (1+1)+4+(2+2)
- (b) (i) State the principles of formulation and prepare a balanced diet for a sedentary adult Indian man.  
(ii) State the importance of dietary lipids.  
(iii) What is Xerophthalmia? 5+3+2
- (c) (i) What are five food groups of Indian diet? State nutritional importance of each food group.  
(ii) State the importance of Salt iodization.  
(iii) What is glycemic index of food? (1+5)+2+2
- (d) (i) State the source and biochemical functions of thiamin.  
(ii) Prepare a balanced diet chart for a Pregnant woman. (2+3)+5
- (e) State the difference between— 2×5  
(i) Pernicious anaemia and Ferropenic anaemia  
(ii) Vitamin D2 and D3  
(iii) Direct Calorimetry and Indirect Calorimetry  
(iv) Ferritin and Transferrin  
(v) Provitamin and Antivitamin.
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