

**M.Sc. [Medical Biochemistry]**

(BF/2023/12)

**Nutrition & Dietetics**

[Paper - III]

**M.M. : 100**

**Time : 3 Hours**

- Note:** 1.) *Attempt all questions.*  
2.) *NO SUPPLEMENTARY SHEET SHALL BE ALLOWED /PROVIDED*  
3.) *The Student must write Q.P. Code in the space provided on the Title Page of the Answer Book.*  
4.) *Illustrate your answers with suitable diagrams.*

1. Describe the biochemical functions of calcium in the body. Explain how calcium homeostasis is maintained in the body. [10]
2. Define based metabolic rate. Explain in detail the factors affecting based metabolic rate. [10]
3. **Write briefly on** [5×2= 10]
  - a. One carbon metabolism
  - b. Balanced diet
4. **Write short notes on** [5×2=10]
  - a. Biochemical functions of vitamin C
  - b. Protein energy malnutrition
5. **Explain why** [2.5×4=10]
  - a. Copper deficiency adversely effects iron metabolism
  - b. Athletes have higher BMR
  - c. Patients with rickets have bone deformities
  - d. Dental caries occurs in fluorine deficiency
6. **Write short notes on** [5×2=10]
  - a. Coenzyme form and biochemical Function of Vitamin B1
  - b. Pellegra
7. **Describe Briefly** [5×2=10]
  - a. Wilson's disease
  - b. Dietary fibre and its importance
8. **Describe briefly** [5×2=10]
  - a. Anemia
  - b. Specific dybamic action
9. **Compare and Contrast** [5×2=10]
  - a. Dry beri beri and wet beri beri
  - b. Water soluble and fat soluble vitamins
10. **Write Short notes on** [5×2=10]
  - a. Ward's visual cycle
  - b. Nutritional requirements in el elderly

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