

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 1023]**

**OCTOBER 2023**

**Sub. Code: 1304**

**M.Sc. CLINICAL NUTRITION  
FIRST YEAR (From 2020-2021 onwards)  
PAPER V – ADVANCE NUTRITION**

***Q.P. Code: 281304***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define Basal metabolic rate. What are the factors affecting Basal metabolic rate?  
b) How Basal metabolic rates are estimated?
2. a) Digestion, absorption and transport of protein.  
b) Explain in detail about various methods to improve quality of protein in the diet.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Explain in detail about the consequences of excessive intake of fat and write about the health benefits of omega 3 fatty acids.
2. Explain in detail about Iodine deficiency disorder.
3. How B vitamins are linked with energy metabolism?
4. Explain the role of folate and Vitamin B12 in nutritional anemia.
5. Write short note on prebiotics and its health benefits.
6. Explain in detail about different types of resistant starch.
7. Explain the role of Vitamin D and calcium in bone health.
8. Write down the functions and deficiencies of electrolytes.
9. Explain the physiological role and deficiency of Iron.
10. Write short note on role of hormone in water balance.

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