

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

**[AHS 0921]**

**SEPTEMBER 2021  
(MAY 2021 EXAM SESSION)**

**Sub. Code: 1302**

**M.Sc. CLINICAL NUTRITION  
FIRST YEAR (From 2012-2014 onwards)  
PAPER II – NUTRITIONAL BIOCHEMISTRY  
*Q.P. Code : 281302***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Write a detailed essay on the De novo synthesis of fatty acids.
2. Write an essay on the role of carbohydrates, lipids and proteins in human nutrition.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Explain about adenosine triphosphate and its importance.
2. Role of vitamin D and calcium.
3. Difference between amylase and amylopectin.
4. Types of lipoproteins
5. How does the temperature and pH affects the enzyme activity.
6. Nutritional classification of amino acids.
7. Describe the hexose monophosphate shunt and add a note on its significance.
8. Classify minerals.
9. Phenyl ketonuria and lactose intolerance.
10. Glycogenolysis.

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