

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

**[BPHARM 0522]**

**MAY 2022  
(FEBRUARY 2022 EXAM SESSION)**

**Sub. Code: 4254**

**B. PHARMACY DEGREE EXAMINATION  
FIRST YEAR – (NON-SEMESTER)  
PAPER IV – BIOCHEMISTRY  
*Q.P. Code: 564254***

**Time: Three hours**

**Answer ALL questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) Define and classify Vitamins with suitable examples.  
b) Write the biochemical functions of Thiamine and Pyridoxine.
2. a) Explain in detail about the classification of Amino acids along with their structure.  
b) Describe transamination reaction and its importance.

**II. Write notes on:**

**(8 x 5 = 40)**

1.  $\beta$  – Oxidation of saturated fatty acid.
2. Gout.
3. Fatty liver.
4. HMP shunt pathway.
5. Classification and biological role of nucleic acids.
6. Prostaglandins.
7. Enzyme induction.
8. Formation and utilization of Ketone bodies.

**III. Short answers on:**

**(10 x 2 = 20)**

1. What is endocytosis?
2. Acid value.
3. Genome.
4. Define Carbohydrate.
5. Benzidine test.
6. Alkaptonuria.
7. Zymogens.
8. Write any two properties of enzymes.
9. Jaundice.
10. Write the functions of Glutathione.

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