

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

**[BPHARM 0122]**

**JANUARY 2022  
(AUGUST 2021 EXAM SESSION)**

**Sub. Code: 4254**

**B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)  
FIRST YEAR (Regulation 2009-2010)  
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) Write about HMP shunt and its significance.  
b) Write a note on substrate level Phosphorylation.
2. a) Explain in detail about Deamination and Decarboxylation.  
b) Write the synthesis of Melatonin and Dopamine with its significance.

**II. Write notes on:**

**(8 x 5 = 40)**

1.  $\beta$ -Oxidation of saturated fatty acid.
2. IUB classification of enzymes.
3. Fatty liver.
4. Hyperbilirubinemia.
5. Classification and biological role of nucleic acids.
6. Glycogenolysis.
7. Enzyme induction.
8. Formation and utilization of Ketone bodies.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Functions of Vitamin D.
2. Acid value.
3. Genome.
4. Define Carbohydrate.
5. Obesity.
6. Alkaptonuria.
7. Transamination.
8. Write any two properties of enzymes.
9. Jaundice.
10. Write the significance of Gluconeogenesis.

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