



RAN-2406120201010502

M. D. (Biochemistry) Examination September - 2025

Theory Paper - II (Set - 1)

Time: 3 Hours]

[Total Marks: 100

સૂચના : / Instructions

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

M. D. (Biochemistry)

Name of the Subject :

Theory Paper - II (Set - 1)

Subject Code No.: **2406120201010502**

Seat No.:

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Student's Signature

- Q. 1.** How regulation of enzyme quantity is done in the cell? Which options are available for regulating catalytic activity of enzyme molecules? Give a suitable examples for each Why are digestive enzymes stored as functionally dormant proproteins? Hematology **(25)**
- Q. 2.** Write Notes on: **(25)**
- Protein anchoring on cell membrane - mechanism and functions
 - Biochemical mechanism of diabetic ketoacidosis
 - Overview of Amino acid metabolism
 - Human Genome Project
 - LDL receptor metabolism and PCSK-9 inhibitors.
- Q. 3.** Write Notes on: **(25)**
- Methemoglobinemia - causes and biochemistry of treatment
 - Chaperone and protein folding
 - Neonatal hyperbilirubinemia
 - Fibrinogen catabolism and its laboratory diagnostic importance
 - EPA and DHA- biochemistry and biomedical importance

Q. 4. Write Notes on:

(25)

- A. Hyperphenylalaninemia
 - B. Magnesium metabolism
 - C. Serum ionized calcium in Lactic acidosis
 - D. Theories aging
 - E. Mechanism of drug resistance by cancer cells
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