

QP Code: 223006

Reg. No.....

**Second Semester B. Pharm Degree Regular/Supplementary
Examinations October 2025**

**Biochemistry
(2017 and 2024 Scheme)**

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Explain the steps involved in the De novo synthesis of palmitic acid.
2. Discuss semi-conservative model of DNA replication.

Short Notes

(7x5=35)

3. Hexose monophosphate shunt and its significance.
4. Define and classify energy rich compounds with examples.
5. Explain various mechanisms of enzyme regulations.
6. Define coenzyme and mention any three coenzymes and their biochemical functions.
7. Explain the catabolism of glycogen.
8. Urea cycle and its significance.
9. Classification and functions of proteins.

Answer Briefly

(10x2=20)

10. What is the significance of Line Weaver Burke's plot.
11. Transamination.
12. What are disaccharides. Give two examples.
13. Hyperbilirubinemia.
14. Define substrate-level phosphorylation with example.
15. Essential amino acids.
16. Inhibitors of protein synthesis.
17. Write the functions of cyclic adenosine monophosphate (cAMP).
18. Phenylketonuria.
19. Significance of TCA cycle.
