

**First Year Pharm D Degree Supplementary Examinations March 2025****Medicinal Biochemistry****Time: 3 Hours****Total Marks: 70**

- *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 table/diagrams/flow charts wherever necessary*

**Essays****(3x10=30)**

1. Explain the reactions sequence, significance and energetics of TCA cycle.
2. Describe the De Novo synthesis of purine nucleotides.
3. Describe the biosynthesis of cholesterol. Add a note on the role of cholesterol in the body.

**Short notes:****(8x5=40)**

4. Note on cyclic AMP and its biological significance.
5. Describe the reactions of urea cycle.
6. What are coenzymes. Explain the biochemical role and deficiency symptoms of niacin.
7. Explain the  $\beta$ -oxidation of saturated fatty acids. Calculate the ATP generated on complete oxidation of palmitic acid.
8. List out different kidney function tests. Explain any two of them.
9. What is ELISA. Give its principle and applications.
10. Enlist the different liver function tests. Explain the dye test for excretory function of liver.
11. Add a note on HDL and LDL.

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