

[Total No. of Questions - 18] [Total No. of Printed Pages - 2]  
(2124)

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**B. Pharmacy 5th Semester Examination**  
**Pharmaceutical Chemistry-V (Biochemistry) (NS)**  
**BP-351**

**Time : 3 Hours**

**Max. Marks : 70**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** The candidates are required to attempt any two questions from Section A, any eight questions from Section B. Section C will be compulsory and students have to answer all questions from Section C.

**SECTION - A**  
**(Attempt any two questions)**

1. Discuss in detail metabolism of glucose explaining its metabolic cycles.
2. Discuss biosynthesis and oxidation of fatty acids and its energetics.
3. Describe in detail biosynthesis of nucleic acids. (10×2=20)

**SECTION - B**  
**(Attempt any eight questions)**

4. Describe biochemical organization of cell and transport processes.
5. Define ketone bodies. Explain their biosynthesis and utilization.
6. Write a note on essential fatty acids and eicosanoids.

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7. Describe Urea cycle and its significance.
8. Explain biosynthesis of purines and pyrimidines.
9. Discuss kinetics of enzyme action.
10. Discuss Citric acid cycle and its significance.
11. Write note on enzyme and co-enzymes involved in oxidation reduction reactions.
12. Discuss about enzymes and co-enzymes in clinical diagnosis.
13. Write a note on inhibition of protein synthesis. (8×5=40)

**SECTION - C**  
**(Attempt all questions)**

14. Write short note on genetic code
  15. Write short note on significance of pentosephosphate pathway.
  16. Discuss significance of Glyoxalic acid cycle.
  17. Define enzyme, coenzyme and isoenzyme.
  18. Mention disorders of urea cycle. (2×5=10)
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