

**B.Sc. DEGREE EXAMINATION, APRIL 2020**  
**II Year III Semester**  
**Biochemistry**

**Time : 3 Hours**

**Max.marks :75**

**Section A** ( $10 \times 2 = 20$ ) Marks

Answer any **TEN** questions

1. Define an enzyme. Give any two examples.
2. What is a co-enzyme and apo enzyme?
3. What is gluconeogenesis?
4. List the intermediate products of kreb's cycle.
5. Give the classification of aminoacids.
6. Explain Transamination with an example.
7. What are ketone bodies? Give examples.
8. Draw the structure of an amino acid.
9. What is alpha oxidation of fatty acids?
10. What is alkaptonuria?
11. Give examples of purine and pyrimidine bases.
12. Define Gout

**Section B** ( $5 \times 5 = 25$ ) Marks

Answer any **FIVE** questions

13. Explain the fate of carbon skeleton of aminoacids.
14. Discuss the deamination process with examples.
15. Explain HMP shunt pathway in detail.
16. Describe the factors affecting enzymatic activity.
17. Discuss the chemical properties of proteins.
18. Explain the interrelationship between carbohydrate, proteins and fats.
19. How much ATPs are formed in TCA cycle. Explain in brief.

**Section C** ( $3 \times 10 = 30$ ) Marks

Answer any **THREE** questions

20. Describe the urea cycle and its significance in the body.
21. Explain beta oxidation of fatty acids.
22. Discuss the aerobic and anerobic pathway of glycolysis reaction.
23. Define phenylketnuria. Explain their mechanism in detail.
24. Describe the metabolism of cholesterol in detail with appropriate examples.

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