

S.No. 8754

16 SACND 3

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

Part III — Allied

FUNDAMENTALS OF BIOCHEMISTRY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions

1. What are polysaccharides?
2. What is glycogenolysis?
3. What is three dimensional structure of proteins?
4. Define transcription.
5. Give the physical properties of lecithin.
6. Why is ATP called high energy compounds?
7. What is rRNA?
8. State on Hypouricemia.

9. Explain about proenzymes.
10. Outline about enzyme inhibition.

SECTION B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b)

11. (a) Discuss the biological significance of carbohydrates.

Or

- (b) Outline the conversion process of non-carbohydrate substance to glucose.

12. (a) Explain the properties of amino acids.

Or

- (b) Discuss the synthesis of protein.

13. (a) Bringout the chemical properties of lipids.

Or

- (b) Summarize about electron transport chain.

14. (a) Give the double helical structure of DNA.

Or

- (b) Outline the synthesis of purine.

15. (a) What is lineweaver – Burk plot equation?

Or

- (b) Write a note on Allosteric inhibition of enzyme activity.

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions

16. Describe the reactions of tri carboxylic acid cycle.

17. Elaborate the metabolism of glutamic acid in detail.

18. Discuss the synthesis of fatty acids.

19. Explain the biosynthesis and catabolism of pyrimidine.

20. Illustrate the Michaelis menton equation of enzyme activity.