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(Pages : 2)

Name.....

Reg. No.....

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

Zoology

ZOL 5B 08T—BIOCHEMISTRY AND MOLECULAR BIOLOGY

(2019 Admissions)

Time : Two Hours and a Half

Maximum : 80 Marks

Section A (Short Answer Questions)

Answer atleast **ten** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 30.

1. What are Aldoses ? Mention example.
2. Define Mutarotation.
3. Write briefly on Isoelectric Point.
4. What is PAGE ? Write any *two* applications of PAGE.
5. Comment on Prostaglandins.
6. Write a note Gluconeogenesis.
7. What is cAMP ? Write its function.
8. Write a note on central Dogma.
9. What are House Keeping Genes ?
10. Draw the secondary structure of tRNA.
11. What is Wobble Hypothesis ?
12. Write the role of Molecular Chaperones.
13. Comment on siRNAs.
14. What are Cryptic Genes ?
15. Differentiate between Mono and Polycistronic Transcription Units.

(10 × 3 = 30 marks)

Turn over

5232

Section B (Paragraph Questions)

Answer atleast **five** *questions.*
Each question carries 6 *marks.*
All questions can be attended.
Overall Ceiling 30.

16. What are Carbohydrates ? Classify Carbohydrates with examples.
17. Comment on different structural levels of Protein.
18. Explain the Beta oxidation of fatty acids.
19. Enlist the salient features of Watson—Crick model of DNA.
20. What is Genetic Code ? Explain the properties of Genetic Code.
21. What are hnRNA ? Write a brief account on capping, tailing and splicing.
22. Comment on Operon model of Gene regulation.
23. Briefly explain the Lytic and Lysogenic cycle.

(5 × 6 =

Section C (Essay Questions)

Answer any **two** *questions.*
Each question carries 10 *marks.*

24. What are Enzymes ? Classify Enzymes. Explain the mechanism of Enzyme action.
25. Describe the process of Glycolysis.
26. Explain the mechanism of replication of DNA.
27. Explain various steps in Translation.

(2 × 10 =