

D 31777

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2022**

Biochemistry

BCH 3C 03—BIOCHEMISTRY—III

(2020 Admissions onwards)

Time : Two Hours

Maximum : 60 Marks

Section A*Answer all questions.**Each question carries 1 mark.*

1. Name an allosteric enzyme.
2. Which among the following enzymes contains Zinc ?
 - a) Hexokinase.
 - b) Carbonic anhydrase.
 - c) Tyrosinase.
 - d) Cytochrome oxidase.
3. The P/O ratio of NADH and FADH_2 are _____ and _____ respectively.
4. Name any two enzymes used in therapeutics.
5. Name one inhibitor each of Complex I and Complex IV of ETC.
6. Write any one irreversible step in glycolysis.
7. The location of TCA cycle and glycolysis are _____ and _____ respectively.
8. Name the primer involved in glycogen synthesis.
9. Name a C3 plant and a C4 plant.

(9 × 1 = 9 marks)

Turn over

Section-B

*Answer any **seven** questions.
Each question carries 3 marks.*

10. Write the significance of glyoxylate pathway.
11. Explain an uncoupler of ETC with suitable example.
12. How does enzyme concentration affect velocity of reaction ?
13. Brief on bio-remediation.
14. What is cyclic photophosphorylation ?
15. What is meant by group specificity and cofactor specificity of an enzyme ?
16. How is trypsinogen and pepsinogen converted to their active forms ?
17. Brief on holoenzyme with a suitable example.

(7 × 3 = 21 marks)

Section C

*Answer any **four** questions.
Each question carries 5 marks.*

18. Illustrate Lineweaver Burk plot and its significance with respect to enzyme inhibition studies.
19. Outline glycogenolysis.
20. Explain the absorption of carbohydrates.
21. Give an account of chemiosmotic hypothesis.
22. Outline C4 pathway.

(5 × 4 = 20 marks)

Section-D

*Answer any **one** question.
The question carries 10 marks.*

23. Discuss about classification of enzymes.
24. Give a detailed account of glycogen metabolism.

(1 × 10 = 10 marks)