

D 51719

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Name.....

Reg. No.....

**THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2023**

Biochemistry

BCH 3C 03—BIOCHEMISTRY—III

(2020 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

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

1. Name any two coenzymes on which oxidoreductases depend.
2. Which among the following catalyse irreversible reaction ?
 - a) Oxidoreductase.
 - b) Transferase.
 - c) Hydrolases.
 - d) Isomerases.
3. Write the name of any *one* enzyme which catalyse irreversible step in glycolytic pathway.
4. Name the zymogen form of trypsin and pepsin.
5. The temperature at which an enzyme exhibits maximum activity is called _____.
6. Name any *two* substrates of gluconeogenesis.
7. The special leaf anatomy seen in CAM plants is called _____.
8. Name two high energy compounds.
9. Name an uncoupler and an inhibitor of ETC.

(9 × 1 = 9 marks)

Turn over

Section B

*Answer any **seven** questions.*

Each question carries 3 marks.

10. Write about the fate of pyruvate in alcohol fermentation.
11. Explain substrate level phosphorylation with a suitable example.
12. What is K_m ? List out the significance of K_m .
13. Differentiate between geometrical specificity and optical specificity of an enzyme.
14. List out the major classes of enzymes.
15. Brief on CAM metabolism.
16. Mention about the sites of ATP production in ETC.
17. Write about high energy compounds with suitable examples.

(7 × 3 = 21 marks)

Section C

*Answer any **four** questions.*

Each question carries 5 marks.

18. Differentiate between cyclic and non-cyclic photophosphorylation.
19. Outline glycogenesis.
20. Explain allosteric regulation with a suitable example.
21. Give an account of the applications of enzymes.
22. Outline gluconeogenesis.

(4 × 5 = 20 marks)

Section D

*Answer any **one** question.*

The question carries 10 marks.

23. Discuss about the light and dark reactions in photosynthesis.
24. Give a detailed account of the glycolytic pathway.

(1 × 10 = 10 marks)