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(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2021**

Biochemistry

BCH 3C 03—BIOCHEMISTRY—III

(2020 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A

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

1. Name the components in a holoenzyme.
2. The double reciprocal plot is also known as _____.
3. Give an example for an oxidoreductase.
4. The pH at which an enzyme exhibits maximum activity is called _____.
5. Write the name of enzyme that catalyses substrate level phosphorylation in TCA cycle.
6. Name two uncouplers of ETC.
7. What are the two major products of pentose phosphate pathway ?
8. Name the two non-gluconeogenic amino acids.
9. Name the first carbon fixation product in C4 plants.

(9 × 1 = 9 marks)

Section B

*Answer at least six questions.
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 18.*

10. Write about Kranz anatomy and its significance.
11. Write down Michaelis rate equation and explain the terms in it.
12. List out the irreversible reactions in glycolysis.

Turn over

13. Mention the role of RUBISCO in photosynthesis.
14. What are Zymogens ? Explain their activation with a suitable example.
15. What is meant by geometrical specificity of enzymes ?
16. Brief on C2 plants.
17. Write about high energy compounds with suitable examples.

(6 × 3 = 18 marks)

Section C

*Answer at least **three** questions.
Each question carries 7 marks.
All questions can be attended.
Overall Ceiling 21.*

18. Discuss about the arrangement of electron carries in ETC.
19. How are enzymes classified ?
20. Explain glyoxylate cycle.
21. Write about different types of enzyme specificity.
22. Outline pentose phosphate pathway.

(3 × 7 = 21 marks)

Section D

*Answer any **one** question.
The question carries 12 marks.*

23. Discuss about the different factors affecting velocity of enzyme catalysed reaction.
24. Give a detailed account on gluconeogenesis.

(1 × 12 = 12 marks)