

D 71667

(Pages : 2)

Name.....

Reg. No.....

THIRD SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCBCSS—UG)

Biochemistry

BCH 3C 03—BIOCHEMISTRY—III

Maximum : 64 Marks

Time : Three Hours

Section A

Answer all questions.

Each question carries 1 mark.

1. Give an example of an oxidoreductase.
2. Name the coenzyme involved in transamination reaction.
3. Name any *two* substrates of gluconeogenesis.
4. Name two major products of HMP shunt pathway.
5. Write the zymogen forms of pepsin and chymotrypsin.
6. Write any *two* isoenzyme forms of LDH.
7. What is plotted in the X and Y-axis of Lineweaver Burk plot ?
8. Give any *two* enzymes and their site which is involved in the digestion of carbohydrate.
9. How many ATPs are generated by the reoxidation of one molecule NADH and FADH₂ ?
10. Write the name of Complex-I and Complex-IV involved in Electron Transport Chain.

(10 × 1 = 10 marks)

Section B

Answer any seven questions.

Each question carries 2 marks.

11. What are lyases ? Give an example.
12. Write the coenzyme forms of Riboflavin.
13. Define apoenzyme and holoenzyme.
14. What is meant by dark reaction ?

Turn over

15. Why is pyruvate converted to lactate ?
16. What are high energy compounds ?
17. Define P/O.
18. What is cyclic photophosphorylation ?
19. Write the reaction catalysed by RUBISCO.
20. What is meant by geometrical specificity of enzyme ?

(7 × 2 = 14 marks)

Section C

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

21. Outline Cori cycle.
22. Explain glyoxylate cycle.
23. What is glycogenesis ?
24. Draw Lineweaver-Burk plot for non-competitive inhibition.
25. What are the fates of pyruvate after glycolysis ?
26. Outline the reactions of Calvin cycle.

(4 × 5 = 20 marks)

Section D

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

27. Write an essay on digestion and absorption of carbohydrate.
28. Give an account of Pentose phosphate pathway.
29. Write an essay on competitive and non-competitive enzyme inhibition.
30. Outline the reactions of TCA cycle.

(2 × 10 = 20 marks)