Reg. No.:....

Name :

V Semester B.Sc. Degree (CBCSS-Reg./Sup./Imp.) Examination, November- 2019

(2014 Admn. Onwards)

CORE COURSE IN BIOCHEMISTRY

5B07 BCH: BIOENERGETICS AND GENERAL METABOLISM

Time: 3 Hours

SECTION - A

Answer all questions. Each question carries one mark.

 $(4 \times 1 = 4)$

Max. Marks: 40

1. Give examples for ketone bodies.

2. What are the co factors involved in TCA process

3. Give examples for glucogenic amino acid

4. What is ATP?

SECTION - B

Answer any 7 questions. Each question carries 2 marks.

 $(7 \times 2 = 14)$

- 5. What is the role of carnitine in fatty acid oxidation?
- 6. What are triglycerides? Give an example.
- 7. What is gluconeogenesis?
- 8. What is albinism?
- **9.** What is anabolism? Give an example.
- 10. What are photosystems?

P.T.O.

- 11. What is fermentation?
- 12. What is the function of pyruvate dehydrogenase?
- 13. What is chymotrypsin? What is its function?

carrano

SECTION - C

Answer any 4 questions. Each question carries 3 marks.

 $(4 \times 3 = 12)$

- 14. Explain the regulation of glycolysis.
- 15. What is inborn errors of metabolism? Explain with any two examples.
- 16. What is the substrate level phosphorylation? Explain with any two examples.
- 17. What are uncouplers? Explain with two examples.
- 18. Explain urea cycle.
- 19. Explain the digestion of proteins.

SECTION - D

Answer any 2 questions. Each question carries 5 marks.

 $(2 \times 5 = 10)$

- 20. Explain boxidation of fatty acids and its significance.
- 21. Discuss the reactions and energetics of TCA cycle.
- 22. Explain photosynthesis and its significance.
- 23. Describe the various experimental approaches to study metabolism.