I. Answer any *four* questions.

Time: Three Hours

- 1. What is epimer? Give an example.
- 2. Why amino acids are amphoteric?
- 3. Give any two biological role of lipids.
- 4. What is micro-RNA?
- 5. Define redox potential?
- 6. Give the biological importance of colloids?
- 7. What is echolocation?

(4 x 2 = 8 Weightage)

II. Answer any *four* questions

- 8. Give a short account on chemical nature and functions of prostaglandins?
- 9. What are the factors that influence the rate of enzyme catalyzed reactions?
- 10. Give the significance of HMP pathway.
- 11. Add a note on protein domains, motifs and folds.
- 12. Give an account of sound transmission of ear.
- 13. What is acid number? Give its significance.
- 14. Explain biosynthesis of lactose.

III. Answer any *two* questions.

- 15. Discuss in detail the role of vitamins as co-enzyme.
- 16. Describe the pathway of glycolysis. Why PFK is considered as the pace maker of glycolysis?
- 17. Explain the biosynthesis of purine nucleotide?
- 18. Give an account of different types and source of ionizing radiation. Explain the major biological effects of ionizing radiation?

(2 x 5 = 10 Weightage)

 $(4 \times 3 = 12 \text{ Weightage})$

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020

(Pages: 1)

(CBCSS-PG)

(Regular/Supplementary/Improvement)

CC19P ZOL1 C01 - BIOCHEMISTRY AND BIOPHYSICS

(Zoology)

(2019 Admission onwards)

Maximum: 30 Weightage

20P114

Name: