

19P114

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Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCSS PG)

CC19P ZOL1 C01 – BIOCHEMISTRY AND BIOPHYSICS

(Zoology)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any **four** questions.

1. Distinguish between epimer and anomer of glucose.
2. Explain the mechanism of echolocation.
3. Mention the structure of glycogen.
4. Comment on the significance of pK value and isoelectric point.
5. Mention Gibb's free energy of activation and comment on its significance.
6. Write the importance of carnitine.
7. Mention the structure and roles of prostaglandins.

(4 x 2 = 8 Weightage)

II. Answer any **four** questions.

8. Describe the mechanism of nutrient transport across membranes.
9. Mention the structural organization of tRNA.
10. Explain the biosynthesis of lactose.
11. Mention the regulation of glycolysis.
12. Mention the Genevan system of fatty acid nomenclature.
13. Explain the fate of amino acids in the body.
14. Write the biosynthesis of pyrimidines.

(4 x 3 = 12 Weightage)

III. Answer any **two** questions.

15. Discuss Electron Transport Chain. Add a note on its inhibitors.
16. Explain Michaelis-Menten hypothesis. Mention the importance of Km and Vmax.
17. Describe the classification, structure and biological roles of Heteroglycans.
18. Discuss the biological effects of ionizing radiations. Mention the importance of radiation therapy.

(2 x 5 = 10 Weightage)
