



045381



K19P 1521

Reg. No. :

Name :

I Semester M.Sc. Degree (CBSS-Reg./Suppl./Imp.)

Examination, October - 2019

(2014 Admission Onwards)

ZOOLOGY

ZOO1C01: CELL BIOLOGY AND GENETICS

Time : 3 Hours

Max. Marks : 60

PART-A
(CELL BIOLOGY)

- I. Answer any **ONE** of the following. (1×12=12)
1. Present an overview of cell cycle. Comment on molecular mechanisms regulating mitosis.
 2. Explain the molecular organization of cell membrane.
- II. Answer any **ONE** of the following. (1×8=8)
3. Describe intercellular communication. Add a note on cell recognition.
 4. Explain the active transport mechanism with examples.
- III. Write short note on any **TWO** of the following. (2×5=10)
5. Autophagy
 6. Synthesis of membrane lipids
 7. Protein glycosylation

PART-B
(GENETICS)

- IV. Answer any **ONE** of the following. (1×12=12)
8. Describe the mechanism of genetic exchange in bacteria.
 9. Write an essay on the genetics of cancer.

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- V. Answer any **ONE** of the following. (1×8=8)
10. Describe the transposable elements of prokaryotes and eukaryotes.
 11. Explain gene conversion. Add a note on Rec-A protein.
- VI. Write short notes on any **TWO** of the following. (2×5=10)
12. BRCA genes
 13. Retrovirus
 14. Tumour suppressor genes
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