

TDC Odd Semester Exam., 2020
held in July, 2021

ZOOLOGY

(Honours)

(3rd Semester)

Course No. : ZOOH-303

(Cell Biology, Genetics and Space Biology)

Full Marks : 35

Pass Marks : 12

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Enumerate the structural differences between a prokaryotic and a eukaryotic cell. Cite example. 7
2. Describe the structure and functions of lysosome with a suitable diagram. 7

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(Turn Over)

UNIT—II

3. Describe the structure of plasma membrane with a suitable diagram. Write a note on active mode of transport. 4+3=7
4. What is cancer? Explain the different stages and types of cancer. 2+5=7

UNIT—III

5. What is Mendelian inheritance? Explain the laws of heredity. 3+4=7
6. What is epistasis? Describe the process and significance of crossing over. 2+5=7

UNIT—IV

7. What is sex-determination? Discuss the concept of sex-linked inheritance. 2+5=7
8. What is mutation? Describe the different types of chromosomal mutations. 2+5=7

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(Continued)

(3)

UNIT—V

9. What is exobiology? Discuss the impact of reduced atmospheric pressure and oxygen tension during space exploration. 2+5=7
10. What is weightlessness? Write a note on ultraviolet radiations and cosmic radiations. 2+5=7

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