



K17U 1722

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.)
Examination, November 2017
(2014 Admn. Onwards)
CORE COURSE IN ZOOLOGY
5B07 ZLG : Cell Biology and Immunology

Time : 3 Hours

Max. Marks : 40

PART – A

Cytology

- I. Answer **any one** : (1×8=8)
- 1) Explain the structure and functions of Ribosomes and Lysosomes.
 - 2) Describe the process of Spermatogenesis and Oogenesis.
- II. Answer **any one** : (1×8=8)
- 3) Explain on Cancer.
 - 4) Explain the different types of Connective tissue cells.
- III. Answer **any two** : (2×3=6)
- 5) Note on polytene chromosomes.
 - 6) Explain Cell Cycle.
 - 7) Explain Parthenogenesis.
 - 8) Note on mitochondria.
- IV. Answer **any six** : (6×1=6)
- 9) Stem cells.
 - 10) Mycoplasma.
 - 11) Viroids.
 - 12) Cell theory.

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- 13) Glyoxysomes.
- 14) Tight junctions.
- 15) Fixatives.
- 16) Metastasis.

V. 17) Answer **all** the following :

(4×1=4)

a) Endosymbiont hypothesis was related to

- | | |
|----------------|-------------------|
| 1) Chloroplast | 2) Mitochondria |
| 3) Ribosome | 4) Both 1) and 2) |

b) Which one of the following cell secrete histamine ?

- | | |
|----------------|----------------|
| 1) Mast Cell | 2) Fibroblast |
| 3) Plasma cell | 4) Macrophages |

c) Which one of the following is a function of Lysosome ?

- | | |
|------------------|----------------------|
| 1) Cell division | 2) Protein synthesis |
| 3) Heterophagy | 4) Fat storage |

d) The basic amino acid associated with histones is

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|-------------|-------------------|
| 1) Glycine | 2) Lysine |
| 3) Arginine | 4) Both 2) and 3) |

PART - B

Immunology

VI. Answer **any two** of the following :

(2×2=4)

- 18) Structure of Antibody.
- 19) Note on opsonisation.
- 20) Allograft rejection.
- 21) Major Histocompatibility Complex.

VII. Answer **any one** of the following :

(1×4=4)

- 22) Explain on hypersensitivity.
- 23) Explain on the type of immunity.