



K17U 2123

Reg. No. :

Name :

III Semester B.Sc. Degree (CCSS – Supplementary) Examination,
November 2017

(2013 and Earlier Admissions)

CORE COURSE IN ZOOLOGY

3B03 ZLG : Cytology and Immunology

Time : 3 Hours

Max. Weightage : 25

SECTION – A
(Cell Biology)

I. Essay (Answer **any one**) :

(Weight : 4)

- 1) Illustrate spermatogenesis and oogenesis.
- 2) Give an account on the structure and function of endoplasmic reticulum.

II. Essay (Answer **any one**) :

(Weight : 4)

- 3) Explain the types of parthenogenesis. Comment on its significance.
- 4) Give an account on the structure and function of plasma membrane.

III. Short essay (Answer **any three**) :

(Weight : 2 each)

- 5) Discuss on the scope and significance of stem cells.
- 6) Comment on the working principle of light microscope.
- 7) Give an account on history and scope of cell biology.
- 8) Describe the significance of mitosis.
- 9) Discuss on benign and malignant tumours.

(3×2=6)

IV. Short answers (Answer **any four**) :

(Weight : 1 each)

- 10) Comment on viroids.
- 11) What are microbodies ?
- 12) What are cytoskeleton ? Comment on their importance.

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- 13) Comment on mycoplasma.
 14) Name any two vital stains.
 15) What is fixation ? Give example for a fixative.
 16) Give the functions of golgi complex.

(4×1=4)

V. Answer the following :

(Weight : 1 each)

- 17) a) _____ is an example for cytoskeleton in a cell.
 b) Protein synthesis takes place in _____ present in cytoplasm.
 c) _____ is a white blood cell.
 d) Neutral red is a _____ stain.

18) Match the following :

- | | | |
|-------------------|---|---------------------|
| a) L-cells | - | Electron microscopy |
| b) Drosophila | - | Golgi complex |
| c) Bouin's fluid | - | Cell line |
| d) Uranyl acetate | - | Parthenogenesis |
| | - | Fixation |
| | - | Giant chromosome |

(2×1=2)

SECTION - B
 (Immunology)

VI. Answer any two :

(Weight : 2 each)

- 19) What are antigens ?
 20) What is primary immune response ?
 21) What is allograft rejection ?
 22) Illustrate the typical structure of an antibody.

(2×2=4)

VII. 23) Match the following :

(Weight : 1)

- | | | |
|---------------|---|-----------------------|
| a) IgG | - | Autoimmune response |
| b) Phagocytes | - | Incomplete antigens |
| c) Haptens | - | Antibody |
| d) T Cells | - | Neutrophils |
| | - | Cell mediate immunity |