



K18U 1529

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.)
Examination, November 2018
(2014 Admn. Onwards)
CORE COURSE IN ZOOLOGY
5 B07 ZLG : Cell Biology and Immunology

Time : 3 Hours

Max. Marks : 40

PART – A
Cytology

I. Answer any two.

(2×8=16)

- 1) Explain on Giant chromosomes.
- 2) Briefly explain various histological techniques.
- 3) Write an account on Parthenogenesis.
- 4) Describe the process of spermatogenesis.

II. Answer any two.

(2×3=6)

- 5) Explain on Mitochondria.
- 6) Make a note on White Blood Cells.
- 7) Explain on Interphase nucleus.
- 8) Comment on Cell Cycle.

III. Answer any six.

(6×1=6)

- 9) Crossing Over.
- 10) Metastasis.
- 11) Mycoplasma.
- 12) Vital stains.
- 13) Gap junction.

P.T.O.

K18U 1529



14) Polysome.

15) Peroxisomes.

16) Cell Theory.

IV. Answer **all** the following :

(4×1=4)

17) a) Which of the following is used as a stain for electron microscopy ?

- i) Lead acetate
- ii) Janus green
- iii) Neutral red
- iv) Rhodamine

b) DNA duplication occurs in which stage of cell cycle

- i) G1
- ii) S
- iii) G2
- iv) M

c) Which of the following cell secrete histamine ?

- i) Mast cell
- ii) Lymphocyte
- iii) RBC
- iv) Mesenchyme cell

d) Acrosome of the sperm is formed from

- i) Ribosome
- ii) Lysosome
- iii) Golgi bodies
- iv) Peroxisome

PART – B
Immunology

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

(2×2=4)

18) Immune response.

19) Immunity.

20) HLA typing.

21) Allograft rejection.

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

(1×4=4)

22) Give a brief account on allergy, anaphylaxis and autoimmune reactions.

23) Explain the structure of antibody ; mention its classification and functions.