



0075910

K19U 2282

Reg. No. :

Name :

V Semester B.Sc. Degree (CBCSS- Reg./Sup./Imp.)

Examination, November-2019

(2014 Admn. Onwards)

Core Course in Zoology

5B 07 ZLG: CELL BIOLOGY AND IMMUNOLOGY

Time : 3 hrs

Max. Marks : 40

PART - A (Cytology)

- I. Answer any **Two**: (2×8=16)
- 1) Explain on Plasma membrane
 - 2) Briefly explain various staining techniques.
 - 3) Write an account on cell cycle.
 - 4) Give a brief description of cells of extracellular matrix.
- II. Answer any **Two**: (2×3=6)
- 5) Explain on chromosomal abnormalities associated with cancer.
 - 6) Make a note on polytene chromosomes.
 - 7) Explain on parthenogenesis.
 - 8) Comment on Oogenesis.
- III. Answer any **Six**: (6×1=6)
- 9) Synapsis
 - 10) Endomitosis
 - 11) Viroid

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- 12) Fixatives
- 13) Microtubules
- 14) Polysome
- 15) Glyoxysomes
- 16) Cell theory

IV. Answer the following:**(4×1=4)**

- 17) a. Which of the following is used as vital stain?
- i) Lead acetate
 - ii) Janus green
 - iii) Osmium tetroxide
 - iv) Uranyl acetate
- b. DNA duplication occurs in which stage of cell cycle
- i) G1
 - ii) S
 - iii) G2
 - iv) M
- c. Which of the following cell organelle is called power house of the cell?
- i) Mitochondria
 - ii) Peroxisome
 - iii) Ribosome
 - iv) Lysosome
- 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) Antibody
- 19) Autoimmune reactions
- 20) HLA typing
- 21) Primary immune response

VI. Answer any One of the following**(1×4=4)**

- 22) Give a brief account on various types of immunity.
 - 23) Explain on antigen - antibody reactions.
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