

2 0 1 5

(5th Semester)

ZOOLOGY

Paper : ZL-V

(**Cell Biology**)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

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

1. What is an eukaryotic cell? Give a comparative account of the structures of prokaryotic cell and eukaryotic cell. 2+5=7

Or

Discuss different ways in which molecules are transported across the cell membrane. 7

G16/143a

(Turn Over)

(2)

2. Write down the structure, composition and functions of ribosomes. 7

Or

Define endocytosis. Discuss different types of endocytosis with diagrams. $2+5=7$

3. Write down the ways in which mitochondria help in the process of cell respiration. 7

Or

Write notes on microfilaments and microtubules. $3\frac{1}{2}+3\frac{1}{2}=7$

4. Discuss how different molecules mediate cell-cell adhesion. 7

Or

Describe the structure and functions of nucleolus. 7

5. What is cancer? Describe different types of cancer. 7

Or

Write down different stages of cell cycle with diagrams. 7

V/zoo (v)

2015

(5th Semester)

ZOOLOGY

Paper : ZL-V

(Cell Biology)

(PART : A—OBJECTIVE)

(Marks : 20)

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SECTION—A

(Marks : 5)

Put a Tick (✓) mark against the correct answer in the brackets provided :

1×5=5

1. 70S ribosome is made up of

(a) 40S and 30S subunits

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(b) 50S and 30S subunits

()

(c) 60S and 40S subunits

()

(d) 20S and 40S subunits

()

2. Golgi complex was described for the first time by

(a) Robert W. ()

(b) C. Nageli ()

(c) Camillo Golgi ()

(d) de Duve ()

3. The enzymes responsible for instability of lysosomal membrane are

(a) labilizers ()

(b) stabilizers ()

(c) nucleosides ()

(d) proteases ()

4. Osteoma is tumor of the

(a) bones ()

(b) connective tissue ()

(c) blood ()

(d) lymph nodes ()

(3)

5. Meiosis is a/an

(a) direct division ()

(b) indirect division ()

(c) reduction division ()

(d) multiplication division ()

(4)

SECTION—B

(Marks : 15)

Write short notes on the following in not more than
5 to 8 sentences each : $3 \times 5 = 15$

1. Carcinogens

V/ZOO (v)/143

(5)

2. Phagocytosis

V/ZOO (v)/143

(6)

3. Cell's suicide bag

V/ZOO (v)/143

(7)

4. Karyotype

(8)

5. Fluid mosaic model

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