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**V—113—2017**

**FACULTY OF SCIENCE**

**B.Sc. (First Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2017**

**(CBCS/CGPA)**

**ZOOLOGY**

**Paper II**

**(Cell Biology)**

**(MCQ+Theory)**

**(Saturday, 18-11-2017)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

*N.B. :— (i) Attempt All questions.*

*(ii) Use separate answer-sheet (OMR) for Question No. 1.*

*(iii) One mark to each correct answer of an MCQ.*

*(iv) Negative marking system is applicable.*

*(v) Use black ball point pen to darken the circle of correct choice in OMR answer-sheet.*

*(vi) Draw well labelled diagram wherever necessary for Question Nos. 2, 3 and 4.*

**(MCQs)**

1. Choose the *correct* answer : 10

(i) Robertson proposed the ..... model of plasma membrane.

(a) Bimolecular

(b) Lattice

(c) Trilaminar

(d) Fluid-Mosaic

P.T.O.

- (ii) Plasma membrane is .....
- (a) Selective barrier
  - (b) Impermeable
  - (c) Non-selective barrier
  - (d) None of the above
- (iii) Acrosome in sperm is formed by .....
- (a) Ribosome
  - (b) Golgi complex
  - (c) Mitochondria
  - (d) Endoplasmic reticulum
- (iv) Who coined the term 'Ribosomes' ?
- (a) Clade
  - (b) Benda
  - (c) Robertson
  - (d) Palade
- (v) Hydrolytic enzymes stored in .....
- (a) Lysosomes
  - (b) Mitochondria
  - (c) Golgi complex
  - (d) Endoplasmic reticulum
- (vi) ..... is known as powerhouse of cell.
- (a) Golgi complex
  - (b) Ribosomes
  - (c) Lysosomes
  - (d) Mitochondria

- (vii) In which of the following cells nucleus is absent ?
- (a) RBCs of man
  - (b) Nerve cells
  - (c) Liver cells
  - (d) WBCs of man
- (viii) The cancer of bone is called :
- (a) Carcinomas
  - (b) Sarcomas
  - (c) Melanomas
  - (d) Lymphomas
- (ix) In which of the following type of chromosomes the centromere is located at the terminal position ?
- (a) Metacentric
  - (b) Acrocentric
  - (c) Telocentric
  - (d) Submetacentric
- (x) Balbiani rings are present in .....
- (a) Lampbrush chromosome
  - (b) Polytene chromosome
  - (c) Polysome
  - (d) Autosome

**(Theory)**

2. Describe in detail structure of an animal eukaryotic cell.

10

*Or*

Write notes on :

- (a) Bimolecular model of plasma membrane
- (b) Zygotene in meiosis.

P.T.O.

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3. Describe in detail structure and functions of mitochondria. 10

*Or*

Write notes on :

(a) Functions of endoplasmic reticulum

(b) Anaphase of mitosis.

4. Explain in detail structure and functions of lysosomes. 10

*Or*

Write notes on :

(a) Lampbrush chromosome

(b) Non-malignant tumour.

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