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**BF—114—2016**

**FACULTY OF SCIENCE**

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

**NOVEMBER/DECEMBER, 2016**

**(Old Course)**

**ZOOLOGY**

**Paper II**

**(Cell Biology)**

**(MCQ & Theory)**

**(Saturday, 10-12-2016)**

**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 correctly answer of 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 diagrams wherever necessary for Question Nos. 2, 3 and 4.*

**(MCQ)**

1. Select the *correct* answer for each of the following MCQs : 10

(i) If a microscope has an 10 × objective lens and 10 × ocular lens, it would magnify the object by :

(a) 100 × (b) 50 ×

(c) 20 × (d) 10 ×

(ii) Cell boundary of animal cell is :

(a) Cell wall (b) Plasma membrane

(c) Both (a) and (b) (d) None of these

P.T.O.

- (iii) Endoskeleton of cell is made up of :
- (a) Endoplasmic reticulum (b) Mitochondria  
(c) Cell wall (d) Cytoplasm
- (iv) Dictyosome is also called as :
- (a) Lysosome (b) Mitochondria  
(c) Golgi body (d) Ribosome
- (v) Suicide bags in cells are :
- (a) Contractile vacuole (b) Ribosomes  
(c) Golgi body (d) Lysosome
- (vi) Nuclear envelope is also known as :
- (a) Karyokinesis (b) Nuclear sap  
(c) Karyotheca (d) Nuclear lamina
- (vii) Who coined the term Nucleolus ?
- (a) Fontana (b) Robert Brown  
(c) Camillo Golgi (d) Robert Hooke
- (viii) If the centromere is present near about in the middle of the chromosome, then this type of chromosome is called as :
- (a) Acrocentric (b) Metacentric  
(c) Telocentric (d) Sub-metacentric
- (ix) Which phase of mitosis is the longest phase ?
- (a) Telophase (b) Anaphase  
(c) Metaphase (d) Prophase
- (x) Lukemias are also called as ..... cancer.
- (a) Liver (b) Blood  
(c) Brain (d) Kidney

**(Theory)**

2. Explain in detail the functions of plasma membrane.

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*Or*

Write notes on :

- (a) Dissecting microscope
- (b) Anaphase of mitosis.

3. Describe the structure and functions of mitochondria. 10

*Or*

Write notes on :

- (a) Structure of 70'S' ribosome
- (b) Significance of Meiosis.

4. Give an account on structure and functions of Lysosomes. 10

*Or*

Write notes on :

- (a) Types of chromosomes according to shapes
- (b) Non-malignant cancer.

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