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**B—150—2019**

**FACULTY OF SCIENCE AND TECHNOLOGY**

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

**MARCH/APRIL, 2019**

**(CBCS/CGPA Pattern)**

**ZOOLOGY**

**Paper- II (CCZ-I)**

**(Cell Biology)**

**(MCQ & Theory)**

**(Thursday, 4-4-2019)**

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

**Time—2 Hours**

**Maximum Marks—40**

**N.B. :- (i) Attempt All questions.**

**(ii) All questions carry equal marks.**

**(iii) Use of separate OMR answer sheet for question no. 1.**

**(iv) One mark each for correctly answered multiple choice question (MCQ)**

**(v) Negative marking system for wrong answer of MCQ is applicable.**

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

**(vii) Darken only one circle for the answer of each MCQ.**

**(viii) Illustrate your answers with suitably labelled diagrams wherever necessary for questions 2, 3, 4.**

**MCQ**

**1. Mark the option for correct answer of each of the following MCQs in OMR answer sheet : 10**

**(i) The image formed in electron microscope in the form of .....**

**(a) Ring or spot**

**(b) Lines**

**(c) Light**

**(d) Dots**

**P.T.O.**

- (ii) Trilaminar model of plasma membrane was proposed by .....
- (a) Singer and Nicolson      (b) Hiller and Hoffman  
(c) Robertson                (d) Wolper
- (iii) The name endoplasmic reticulum was coined by .....
- (a) Benda                        (b) Porter  
(c) Wolper                        (d) Robert Brown
- (iv) The term "Mitochondria" was introduced by .....
- (a) Kollikar                      (b) Fleming  
(c) Fontana                        (d) Benda
- (v) Lysosomes were discovered by :
- (a) J. Rhodin                      (b) Fontana  
(c) C. De Duve                    (d) Waldeyer
- (vi) The term chromosome was coined by .....
- (a) Waldeyer                      (b) Karl Nageli  
(c) Hofmeister                    (d) Walter
- (vii) Blood cancer is also known as :
- (a) Sarcoma                        (b) Carcinoma  
(c) Leukemias                      (d) Melanomas
- (viii) Replication of DNA takes place in ..... phase of cell cycle.
- (a) S                                (b) M  
(c) G<sub>1</sub>                                (d) G<sub>2</sub>
- (ix) Golgi complex is also known as :
- (a) Bioblast                        (b) Lipochondria  
(c) Vacuoles                        (d) Sarcosomes



WT

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- (x) Micellar modes of plasma membrane was proposed by :
- (a) Hiller and Hoffman (b) Robertson  
(c) Singer and Nicolson (d) Garter and Grendel

**Theory**

2. Explain in detail fluid mosaic model of plasma membrane. Add a note on its functions. 10

Or

Write notes on :

- (a) Light Microscope  
(b) Significance of Mitosis.

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

Or

Write notes on :

- (a) 70S ribosome  
(b) Malignant tumour.

4. Explain structure and functions of Nucleus. 10

Or

Write notes on :

- (a) Polytene chromosome  
(b) Metaphase in mitosis.