

This question paper contains 3 printed pages]

Y—150—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

OCTOBER/NOVEMBER, 2019

ZOOLOGY

Paper II (CCZ-I)

(Cell Biology)

(MCQ & Theory)

(Thursday, 21-11-2019)

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 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 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 suitable labelled diagrams wherever necessary for questions 2, 3 and 4.

MCQ

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

- (i) The first operational light microscope was constructed by.....
 - (a) Knoll and Ruska
 - (b) Prebus and Miller
 - (c) Janssen and Hans
 - (d) Siemens
- (ii) Plasma membrane is.....membrane.
 - (a) Selectively permeable
 - (b) Permeable
 - (c) Impermeable
 - (d) Semipermeable

P.T.O.

- (iii) The function of rough endoplasmic reticulum is.....
- (a) Lipid synthesis (b) Protein synthesis
(c) Carbohydrates synthesis (d) Vitamin synthesis
- (iv) ATP formation in mitochondria takes place in.....
- (a) Outer chamber
(b) Outer mitochondrial membrane
(c) Matrix
(d) Cristae
- (v) Nuclear envelop is also known as.....
- (a) Karyotheca (b) Karyokinesis
(c) Nuclear sap (d) Nuclear lamina
- (vi) Nucleolus is associated with the biogenesis of.....
- (a) Endoplasmic reticulum (b) Ribosomes
(c) Lysosomes (d) Golgi complex
- (vii) Rapid and uncontrolled cell division leads to.....
- (a) Cancer (b) Ulcer
(c) Cleavage (d) Development
- (viii) The term meiosis was coined by.....
- (a) C. Cramer (b) J.B. Farmer
(c) Howard (d) Waldeyer
- (ix)type of ribosome found in prokaryotes.
- (a) 70S (b) 80S
(c) 60S (d) 40S
- (x) Lysosome contains.....of enzyme.
- (a) Proteolytic (b) Hydrolytic
(c) Nuclease (d) Endonuclease

Theory

2. Describe in detail structure of an animal eukaryotic cell. 10

Or

Write notes on :

- (a) Lattice model of plasma membrane
- (b) Significance of meiosis

3. Describe in detail structure and functions of endoplasmic reticulum. 10

Or

Write short notes on :

- (a) Functions of Golgi complex
- (b) Non-malignant tumour.

4. Describe in detail structure and functions of chromosome. 10

Or

Write notes on :

- (a) Nucleolus
- (b) Zygotene in meiosis.