

F.Y.B.Sc. SEM – I (CBCS 2018 COURSE) : WINTER - 2018

SUBJECT : Zoology: Cell Biology & Genetics

Day : Thursday
Date : 25/10/2018

W-2018-0676

Time : 11.00 A.M TO 02.00 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figure to the right indicate **FULL** marks.
 - 3) Draw neat labeled diagrams **WHEREVER** necessary.
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Q.1 Attempt **ANY TWO** of the following: **(12)**

- a) Give an account of ultrastructure of mitochondria. Add a note on its functions.
- b) What is cytoskeleton? Describe structure and functions of microtubules.
- c) Explain law of independent assortment with suitable example.

Q.2 Attempt **ANY TWO** of the following: **(12)**

- a) Give detailed account of numerical changes in chromosome.
- b) Describe law of dominance with suitable example.
- c) Describe the fluid mosaic model of plasma membrane.

Q.3 Attempt **ANY TWO** of the following: **(12)**

- a) What is meant by eugenics? Explain positive and negative eugenics?
- b) Describe structure and functions of Golgi complex.
- c) Compare prokaryotic and eukaryotic cell.

Q.4 Attempt **ANY THREE** of the following: **(12)**

- a) Describe structure and functions of lysosomes.
- b) Give an account on ultrastructure of nucleus.
- c) Write a note on deletion in chromosome.
- d) Describe Turner's syndrome.

Q.5 Attempt **ANY FOUR** of the following: **(12)**

- a) Write functions of endoplasmic reticulum.
- b) Describe structure of ribosomes.
- c) Write characters of multiple alleles.
- d) Describe functions of chromosome.
- e) Write note on translocation in chromosome.
- f) Write short note on co-dominance.

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