

Seat no-

Shivaji University, Kolhapur

Semester Examination Oct/Nov-2023

B.Sc.-Part-I (Semester-I) (NEP 2020)

Zoology

DSC-16A: Cell biology and Evolutionary biology

Date- 19/11/2023

Time-2hrs 02.30 to 04.30

Day - Friday

Marks- 40

Instructions- 1) All questions are compulsory.

2) Figures to right indicate full marks.

3) Draw neat labelled diagrams wherever necessary.

Q1) Select the correct alternatives from the following.

(08Marks)

1) The compound microscope was built by

a) Galileo b) Robert Hooke c) Loewy d) Leeuwenhoek

2) The smallest cell belongs to the genus.....

a) Asterias b) Mycoplasma c) Amoeba d) Ascaris

3) Number of chromosome in man is

a) 48 b) 47 c) 46 d) 60

4) Theare called the power house of cells

a) Lysosome b) Ribosome c) Golgi complex d) Mitochondra

5)are V shaped chromosome having two nearly equal arms

a) Submetacentric b) Metacentric c) Acrocentric d) Telocentric

6) In the reducing atmosphere of earth which gas was absent.....

- a) Nitrogen b) Hydrogen c) Oxygen d) Ammonia

7) The theory of natural selection for organic evolution is put forward by.....

- a) De Vries b) Lamarck c) Darwin d) Mendel

8) Fossilized foot prints are the type of

- a) Moulds b) Petrification c) Casts d) Ichnofossils

Q2) Attempt any two of the following.(16 Marks)

- 1) Give an account of morphology and a typical structure of a chromosome
- 2) What is endoplasmic reticulum? Describe the types and ultrastructure of it
- 3) Describe Miller-Urey experiment

Q3) Attempt any four of the following.(16 Marks)

- 1) Describe the fluid mosaic model of plasma membrane
- 2) Give an account of the of mitochondria
- 3) Explain ultrastructure of lysosome
- 4) Give an account of concept of species
- 5) Describe different types of fossils
- 6) What is mass extinction? Give any cause of same
