

**B.Sc. (part – I) (Semester – I) (NEP) Examination, March/April- 2023**

**ZOOLOGY**

**Cell Biology and Evolutionary Biology (Paper – II)**

**Sub. Code: 88182**

Day and Date: 11/11/2023

Total marks: 40

Time: 02:30 pm to 04:30 pm

Instructions: 1) All questions are compulsory.

2) Draw neat and labeled diagrams wherever necessary.

3) Figures to right indicate full marks.

Q.1) Choose the correct alternative from the following. [8]

1) The fluid mosaic model of plasma membrane was proposed by .....

A) S.J.Singer and G. L. Nicolson, B) Robert Hook, C) Cook, D) Darwin.

2) Ultrastructural studies reveal that the nuclear membrane is made up of ..... membrane

A) One , B) Two , C) Three , D) Four .

3) The number of chromosomes in man is .....

A) 48 B) 47, C) 46, D) 60.

4) ..... are 'L' shaped chromosomes having two unequal arms .

A) Submetacentric, B) Metacentric, C) Acrocentric, D) Telocentric.

5) The ..... are called “power house” of cell.

A) Golgi complex, B) Endoplasmic reticulum, C) Lysosomes, D) Mitochondria.

6) Fossilized foot prints are the type of .....

A) Moulds, B) Petrification, C) Casts, D) Ichnofossils.

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

A) Asterias, B) Mycoplasma, C) Amoeba, D) Ascaris.

8) The ..... is the heart of the cell.

A) Mitochondria, B) Golgi complex, C) Nucleus, D) Ribosomes.

Q.2) Attempt any two:

[16]

1) Give an account on structure of mitochondria.

2) Give an account on morphology and a typical structure of a chromosome.

3) Describe the fluid mosaic model of the plasma membrane.

Q.3) Attempt any four:

[16]

1) Cell size.

2) Types of chromosomes.

3) Types of fossils.

4) Functions of endoplasmic reticulum.

5) Functions of nucleus.

6) Cell theory.