

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(First Semester)

Branch – ZOOLOGY

CELL BIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

$$(5 \times 1 = 5)$$

- 1 What is the size of a typical eukaryotic cell?
a) 1-2 μ m b) 0.1 – 0.2 μ m
c) 0.2 -0.3 μ m d) 2-3 μ m

2 Which of the following cell organelles is called a suicidal bag?
a) Lysosomes b) Golgi bodies
c) Cell membrane d) Mitochondria

3 Which of the following cell organelles is called the powerhouse of the cell?
a) Nucleus b) Lysosomes
c) Chloroplast d) Mitochondria

4 The term chromosome was coined by _____.
a) Sutton b) Boveri
c) Waldeyer d) Hoffmeister

5 Cancer cells are
a) BHK b) Veo
c) HL-8 d) Hela cells

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

$$(5 \times 3 = 15)$$

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a) Distinguish the stages of cell cycle.
(OR)
b) Enumerate the principle of electron microscope.
- 12 a) Elucidate the fluid mosaic model of plasma membrane.
(OR)
b) Justify the 80S ribosomes.
- 13 a) Discuss the structure and any three important function of mitochondria.
(OR)
b) Enumerate the Structure and function of centrosome.
- 14 a) What are the features of double helix structure of DNA? – Discuss.
(OR)
b) Elucidate the structure and any three function of t RNA.
- 15 a) Categorize the most common tumour suppresser gene.
(OR)
b) Discover the cellular function of oncoproteins.

Z-Z-Z

END