

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019  
(First Semester)

Branch-ZOOLOGY

CELL BIOLOGY

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(10x1 = 10)

- 1 The term cell was given by  
(i) Robert Hooke (ii) Tatum  
(iii) Schwann (iv) De bary
- 2 The cell is not applied for  
(i) Algae (ii) Bacteria  
(iii) Virus (iv) fungi
- 3 In a normal human being number of chromosom  
(i) 23 (ii) 46  
(iii) 53 (iv) 26
- 4 In Word Lysosoma, Lyso means splitting and soma means  
(i) Cell (ii) Body  
(iii) Tissue (iv) Organic
- 5 Golgi apparatus is found virtually in all cells which are in nature  
(i) Prokaryotic (ii) Eykaryotic  
(iii) Protozoans (iv) Protoctists
- 6 Exchange of materials takes place between nucleus and cytoplasm with the help of  
(i) Nuclear pore (ii) Membrane  
(iii) Nucleus (iv) Chromatin
- 7 A very important organelle which is also called power house of cell is  
(i) Mitochondria (ii) Golgicomplex  
(iii) Nucleus (iv) Cell membrane
- 8 Name the process by which a malignant cell spread throughout normal cells.  
(i) Transformation (ii) Metastasis  
(iii) Invasiveness (iv) Progression
- 9 Which of the following is not the type of cancer?  
(i) Carcinomas (ii) Sarcomas  
(iii) Leukemia (iv) Caspases
- 10 What is the origin of the cancer cells?  
(i) Monoclonal (ii) Polyclonal  
(iii) Stem cells (iv) Mesodermal cells

Cont...

**SECTION - B (35 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Explain the principle of microscope.  
OR  
b Describe the structure of prokaryotic cell.
- 12 a Describe the chemical composition of plasma membrane.  
OR  
b Write a short notes on functions of ribosomes.
- 13 a Draw and explain the endoplasmic reticulum.  
OR  
b Explain the ultra structure of mitochondria.
- 14 a Write a notes on chromosomes.  
OR  
b Describe the chemical nature of DNA.
- 15 a Write a notes on cancer cells.  
OR  
b Explain about the apoptosis.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Write an essay on mitosis.
- 17 Give an account on various models of plasma membrane.
- 18 Write an essay on nucleus.
- 19 Give an account on various types of RNA.
- 20 Explain - Tumour suppressor genes.

Z-Z-Z

END