

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2018
(Sixth Semester)

Branch - **BIOCHEMISTRY**

CELL - A MOLECULAR APPROACH

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define cytokinesis.
- 2 What is apoptosis?
- 3 Define - Sarcoma.
- 4 What is an antioncogene?
- 5 Mention the benefits of stem cell transplantation.
- 6 Define embryonic stem cell.
- 7 Give any two uses of PCR.
- 8 What is Proteomics?
- 9 What is a clone based map?
- 10 Mention the significance of analysis on human disease gene.

SECTION - B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Explain the cell cycle in yeast.
OR
b Describe the mechanism of apoptosis.
- 12 a Describe the features of a cancer cell.
OR
b Discuss about the transformation of cells in culture.
- 13 a Explain about liver replacement.
OR
b Discuss oh adult stem cell therapy.
- 14 a Discuss on protein-protein interaction.
OR
b How would you diagnose genetic disease using RFLP?
- 15 a Why is the.human genome project so important?
OR
b Discuss on positional cloning.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Describe the structure and mechanism of action of G-protein coupled receptors.
- 17 Discuss on oncoproteins and their functions.
- 18 Explain the principles and applications of tissue engineering.
- 19 Give an account on DNA micro arrays.