

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY
(Sixth Semester)

Branch- BIOCHEMISTRY

CELL - AMOLECULAR APPROACH

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

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

Define the following : .

- 1 ' CDKC.
- 2 Cyclin D.
- 3 . * Hela Cells.
- 4 Carcinogen.
- 5' ■ Scaffold.
- 6 Molecular therapeutics.
- 7 Proteomics.
- 8 Genomics.
- 9 Con tigs.
- 10 Inventor of DNA sequencing. •

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Write a note on apoptosis.
OR
b Explain receptor tyrosine Kinase pathway.
- 12 a Explain cancer metastasis with a neat diagram.
OR *
b Describe cell lines with examples.
- 13 a Write a note on tissue engineering.
OR
b Illustrate liver replacement engineering.
- 14 a Describe molecular diagnostics.
* OR
b Explain DNA micro array analysis.
- 15 a What are the two methods used in HGP? Explain with suitable diagrams.
• OR
b Exemplify the construction of physical maps of human chromosomes.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Elaborate on cell cycle and regulatory proteins.
- 17 Describe (i) Properties of cancer cells (ii) Oncogenes.
- 18 Discuss stem cell therapy and stem cell transplantation
- 19 Give .detailed account on PCR.
- 20 Discus positional cloning and cloning of disease gene.

Z-Z-Z

END