14BCV26 / 14BCU26

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2019
(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 interphase nucleus.
2 What is cell signaling?
3 What is Oncogene?
4 Define the term cell transformation.
5 What is finite cell lines and continuous cell lines?
6 Mention any two applications of stem cell therapy.
7 Write the principle of PCR.
8 What is proteomics?
9 Define the term STS.
10 Write any two human disease genes.

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a Write short notes on cell cycle control mechanism.
OR
b Mention cell signaling molecules.

12 a Explain oncoproteins and their functions.
OR
b Write the types and progression of cancer.

13 a Mention the technique involved in the liver replacement.
OR
b Write short notes on embryonic stem cell.

14 a Give the principle and applications of RFLP.
OR
b What is protein - protein interaction? Explain.

15 a Explain positional cloning.
OR
b What is Physical maping of chromosome? Explain.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Illustrate the mechanism of apoptosis.
17 Elaborate the properties of Cancer cell.
18 Write in detail on the principle and applications of tissue engineering.
19 Explain the technique DNA microarray.
20 WTat is HGP? Explain in detail.