

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - **BIOTECHNOLOGY**

GENOMICS & PROTEOMICS

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

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

- 1 Minisatellites.
- 2 Somatic hybridization.
- 3 . Paralogs.
- 4 Contigs.
- 5 PAGE.
- 6 Bait & Prey.
- 7 Pharmacogenomics.
- 8 Gene targets.
- 9 Reverse transcriptase PCR.
- 10 DNA chip.

SECTION - B (25 Marks!)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5x5 = 25)

- 11 a Write a short notes on AFLP.
OR
b Brief on genome organisation of Eukaryotes.
- 12 a Write a short notes on BAC.
OR
b What is Exon Shuffling?
- 13 a Brief on Isoelectric focusing.
OR
b What is Differential display.
- 14 a Brief on Genomic medicine.
OR
b Explain Drug discovery.
- 15 a List out the applications of Proteomics.
OR
b Explain PCR directed Protein arrays.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Explain the features of RFLP. its applications and disadvantages.
- 17 Explain the various approaches of Whole Genome sequencing in detail.
- 18 Discuss the role of SAGE in Gene expression.
- 19 Describe the High throughput screening of drug.
- 20 Explain the principle & applications of Micro array in detail.