

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(Fifth Semester)

Branch- ZOOLOGY

BIOTECHNOLOGY -1

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 2 = 20)

- 1 Molecular scissors.
- 2 Linkers.
- 3 Plasmid as a vector.
- 4 Cosmid.
- 5 Gene gun.
- 6 Transformation.
- 7 HGP.
- 8 Define DNA as a vaccine.
- 9 P³² DNA.
- 10 PEG.

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a Describe about the basic requirement of electrophoretic techniques and its principle.
OR
b Write a short note on scope and importance of Biotechnology.
- 12 a State about the PBR322.
OR
b Explain about yeast plasmid vector.
- 13 a What are the methods to be adopted for transferring of rDNA into bacteria?
OR
b Explain shortly about selection of recombinant methods.
- 14 a Delineate the peptide hormone genes.
OR
b List out the advantages and disadvantages of DNA vaccine.
- 15 a Describe about the Gene Therapy.
OR
b Write an account on DNA profiling.

SECTION - C (30 Marks!)

Answer any THREE Questions

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

- 16 Elucidate the restriction enzyme and its significance in Biotechnology.
- 17 Enumerate in detail about DNA library.
- 18 Highlight the northern and western blotting techniques.
- 19 Discuss about the gene cloning in plant cell with suitable example.
- 20 Summarize the monoclonal antibody preparation and its significance.