

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(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 Taq Polymerase.
- 2 Primer.
- 3 Cosmids.
- 4 Genomic library.
- 5 Transfection.
- 6 Blot.
- 7 Gene clone.
- 8 Electroporation.
- 9 Hybridoma.
- 10 DNA probe.

SECTION - B (25 Marks!)

Answer ALL Questions

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

- 11 a List out the achievements of biotechnology.
OR
b Give an account on linkers and adaptors.
- 12 a Write a note on types of plasmid.
OR
b Write an account of plant viral vectors.
- 13 a Write short notes on transfer of rDNA into bacteria.
OR
b Write briefly about Western blotting technique.
- 14 a Describe Ti-DNA based gene transfer in plant cells.
OR
b Write a note on genetically engineered vaccines.
- 15 a Comment on gene gun.
OR
b Write short notes on DNA profiling.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Write a detailed account of polymerase chain reaction technique and its applications.
- 17 Explain the process of constructing cDNA bank.
- 18 Explain the process of southern blotting technique and add a note on its uses.
- 19 Give an account of DNA sequencing methods.