

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION MAY 2017  
(Fourth Semester)

Branch- BIOTECHNOLOGY

rDNA TECHNOLOGY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

, Answer ALL questions

ALL questions carry EQUAL marks

(10 x 2 = 20)

- 1 Cryptic plamid.
- 2 Run away vector.
- 3 Restriction mapping.
- 4 Polynucleotide kinase.
- 5 Transduction.
- 6 Phagemid.
- 7 Hybridization.
- 8 Oligo nucleotide directed mutagenesis.
- 9 Flavour Savr tomato.
- 10 SNP.

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Comment on the natural plasmids.  
OR  
b Give brief account on preparation of phage DNA.
- 12 a Write briefly about Gel Electrophoresis.  
OR  
b Short note on DNA ligase.
- 13 a Write about the identification of recombinant phage.  
OR  
b Explain briefly on cloning vectors for E.Coil.
- 14 a Discuss - cDNA library.  
OR  
b Write a brief note on steps involved in PCR.
- 15 a Short note the recombinant insulin and vaccines.  
OR  
b Comment on genetic fingerprinting.

SECTION - C (30 Marks)

• Answer any THREE Questions

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

- 16 Write a detailed account on preparation of bacteria DNA.
- 17 Discuss - restriction endonuclease enzyme and its activity.
- 18 • Explain about the methods of introducing DNA into bacterial cell.
- 19 Write about the DNA sequencing methods.
- 20 Illustrate an account on expression vectors.