

B.Sc. V-Semester (CBCS) Examination, November / December 2018

Subject : Bio-Technology
(Molecular Biology and Recombinant DNA Technology)

Paper – V : (DSC)

Time : 3 Hours

Max. Marks: 60

PART – A (5 x 3 = 15 Marks)

(Short Answer Type)

Note : Answer any FIVE of the following questions.

- 1 Explain reverse transcription.
- 2 What is CAP-cAMP system?
- 3 Write a short note on transcription machinery.
- 4 Describe mating types in yeast.
- 5 Write about PCR and its applications.
- 6 Explain Southern, northern and western blotting techniques.
- 7 Detail Zoo blot.
- 8 Describe cosmid and phagemid vectors.

PART – B (3 x 15 = 45 Marks)

(Essay Answer Type)

Note: Attempt ALL the questions

- 9 (a) Detail the steps in transcription.
OR
(b) Explain the process of translation.
- 10 (a) Explain the structure of eukaryotic gene.
OR
(b) Write in detail about the role of transcription factors.
- 11 (a) Describe the applications of rDNA technology in agriculture and medicine.
OR
(b) Write in detail various gene transfer techniques.