

61517

V Semester B.Sc. Examination, March/April 2022
(CBCS Scheme)
GENETICS – V
Recombinant DNA Technology

Time : 3 Hours

Max. Marks : 70

Instruction : Draw diagrams *wherever* necessary.

PART – A

I. Answer **any 5** of the following.

(5×3=15)

- 1) Explain the mode of action of DNA Ligase.
- 2) Comment on Ti Plasmids.
- 3) What are Bacteriophages ? Give two examples.
- 4) What is a genomic library ?
- 5) What is insertional inactivation ? Comment.
- 6) Explain the role of Taq polymerase.
- 7) List any three value added attributes of transgenic cow.

PART – B

II. Answer **any 5** of the following.

(5×5=25)

- 8) Describe puc/8 with a neat labelled diagram.
- 9) What are restriction enzymes ? Explain its types.
- 10) List the properties of an ideal vector.
- 11) Explain 'Microinjection'. Add a note on its advantages and disadvantages.
- 12) Explain any two direct methods of screening of recombinant colonies.
- 13) Describe the western blotting technique.
- 14) List the applications of transgenic sheep.



P.T.O.