

( 4 )

Total Pages—4

M.Sc.—Biotech-IIIS(3.4)

7. Write short notes on the following :

(i) SSR

(ii) Tilling.

8. What is QTL and explain its significance in mapping structured population.

2019

( January )

Time : 2 hours

Full Marks : 40

Answer any four questions from any one Group as per your specialization

*All questions carry equal marks*

*Candidates are required to answer in their own words as far as practicable*

GROUP – A

( PLANT BIOTECHNOLOGY )

1. Write short notes on the following :

(i) Organogenesis

(ii) Somatic embryogenesis

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2. Write short notes on the following :

(i) Somaclonal variation

(ii) Male sterility.

3. Describe the protoplast isolation and culture methods.

4. Describe the structural features of Ti-plasmid.

5. Write short notes on the following :

(i) Reporter genes

(ii) 35S promoter.

6. Describe the molecular mechanism used in terminator seed technology.

7. Describe with examples role of plant biotechnology in improving insect resistance in plants.

8. Explain the advantages and limitations of chloroplast transformation.

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GROUP — B

( AGRICULTURAL BIOTECHNOLOGY )

1. Explain the mechanism of protein synthesis in eukaryotes.

2. Write short notes on the following :

(i) Recombination

(ii) Mutation.

3. Write an account of artificial insemination and describe its limitations.

4. Write short notes on the following :

(i) Germplasm

(ii) Utero testing of foetus.

5. Describe the different native breeds of cows in India and their advantages over Jersey breed.

6. What are the approaches for identification of different animal species.