

APRIL/MAY 2019

**MAM24B — GENETIC ENGINEERING**

Time : Three hours

Maximum : 75 marks

**SECTION A — (5 × 6 = 30 marks)**

Answer ALL questions.

1. (a) Discuss briefly about Recombination.

Or

- (b) Brief note on general characteristics of Mutants.

2. (a) Describe about Reverse transcriptase enzyme.

Or

- (b) Explain in brief about cosmids.

3. (a) Write about Nucleic acid hybridization.

Or

- (b) Give a short note on Dot blot technique.

4. (a) Write about any one method of artificial gene transfer.

Or

- (b) What are the various steps involved in isolation of gene?

5. (a) Write a brief note gene therapy.

Or

- (b) Gene knockout technique — Explain in brief.

**SECTION B — (3 × 15 = 45 marks)**

Answer any THREE questions.

6. Write a detail account on biochemical basis of mutations.

7. What is plasmid? Explain in detail.

8. Give an account on genomic library.

9. Discuss in detail about polymerase chain reaction (PCR).

10. Explain about site directed mutagenesis.