

NOVEMBER/DECEMBER 2018

**MAM32 — RECOMBINANT DNA
TECHNOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL the questions.

1. (a) Write an account on linkers and adaptors used in cloning.

Or

- (b) What is plasmid vector? Explain the types of plasmid.

2. (a) Describe the principle and method of pulse field gel electrophoresis.

Or

- (b) Explain briefly about the principle of DNA finger printing.

3. (a) Write a note on vectors used in cDNA library construction.

Or

- (b) Explain RAPD.

4. (a) Comment on RT-PCR.

Or

- (b) What is STS mapping? Explain.

5. (a) Expand GMP. Add a note on it.

Or

- (b) How interferons are used in human therapies.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. Describe in detail the role of bacteriophages and cosmid as cloning vectors.

7. Explain in detail about SDS-PAGE in protein characterization.

8. Write an essay on PCR.

9. Describe the Maxam-Gilbert chemical method of DNA sequencing with a neat sketch.

10. Give a detailed account on animal cloning.