APRIL/MAY 2019

MAM32 — RECOMBINANT DNA TECHNOLOGY

Time : Three hours Maximum : 75 marks

SECTION A — (5 × 6 = 30 marks)

Answer ALL questions.

1. (a) What are the characteristics features of BACs?

Or

(b) Write short notes on phage lambda.

2. (a) Describe the Northern blotting technique.

Or

(b) Briefly describe the principles of electrophoresis.

3. (a) Write about the various thermophilic enzymes used in PCR.

Or

(b) Differentiate gradient PCR from touch down PCR.

4. (a) Write a short notes on DNA microarray.

Or

(b) Describe the DD-PCR. Add notes on its advantages.

5. (a) Describe the transgenic plants with its importance.

Or

(b) Explain in brief about HACCP.

SECTION B — (3 × 15 = 45 marks)

Answer any THREE questions.

6. Explain the procedure for selection and screening of clones.

7. Write in detail about DNA finger printing and its application.

8. Give a detailed account on the steps and enzyme involved in the construction of cDNA library.

9. Explain the principles and procedure of Serial Analysis of Gene Expression (SAGE).

10. Explain the production of insulin using rDNA technology.

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