



Medicinal Plant Biotechnology -II

Q.P. CODE: 5173

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any Three)

3 X 10 = 30 Marks

1. Define tissue culture. Give an account on the process and applications of somatic embryogenesis.
2. Discuss in detail the process and applications of recombinant DNA technology.
3. Explain vector mediated gene transfer in detail and give its applications.
4. Describe various methods for in plant cell immobilization and its applications in secondary metabolite production.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

5. Describe any one method used in gene identification in transgenic plants.
6. What are synthetic seeds and give their applications.
7. Write short note on historical perspectives and development of plant biotechnology as source of medicinal plants.
8. Give procedure for sterilization of explants.
9. Discuss the application of micro-propagation.
10. Write short note on Bioreactors for plant cell culture.
11. Write a note on regulation of gene expression.
12. Write short note on protoplast fusion.
13. Define fermentation. Give applications of fermentation technology.
14. Give a brief account on elicitors and their applications in product of secondary metabolites.

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