Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination – JAN-2019

[Time: 3 Hours] [Max. Marks: 75]

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. What do you mean by plant cell immobilization? Discuss various techniques used in immobilization of plant cells give its applications.
2. What are transgenic plants? Give an account on production of phytopharmaceuticals by transgenic plants.
3. Explain production and applications of hairy root culture and multiple shoot culture.
4. Discuss of techniques employed in identification, localization and sequencing of genes.

SHORT ESSAY (Answer any Nine) **9 X 5 = 45 Marks**

5. Write a short note on cell signaling.
6. Give applications of recombinant DNA technology.
7. Write the steps involved in protoplast fusion.
8. Describe chemically mediated gene transfer in plants.
9. Write short note on role of precursors and elicitors on production of secondary metabolites.
10. Write a note on production and applications of single cell proteins.
11. Explain briefly structure of RNA.
12. Write a note on monoclonal variation.
13. Give one method for production of synthetic seeds.
14. Define fermentation and applications of fermentation technology.

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