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Reg. No. : .....

Name : .....

Seventh Semester B.Tech. Degree Examination, June 2009

(2003 Scheme)

Branch : Biotechnology

03.706.3 : (Elective – III) : PLANT AND ANIMAL CELL TECHNOLOGY (B)

Time : 3 Hours Max. Marks : 100

PART – A

Answer **all** questions.

1. Comment on "cocultivation".
2. Give an account of DNA recombinant technology for crop improvement.
3. Discuss the classification of plant vector.
4. Explain RFLP and the factors influencing disease resistance and susceptibility.
5. What is "EPSP gene" and give its application in transgenic plant.
6. Comment on class I mobile elements.
7. Discuss the animals used in animal biotechnology.
8. Give the major advantages and disadvantages of animal tissue culture.
9. Write short notes on MCB and MWCB.
10. Describe the available methods for disaggregate animal tissue. **(10×4=40 Marks)**

P.T.O.

PART – B

Answer **one** question from **each** Module.

MODULE – I

11. With diagram explain the process of plant gene regulation. **(1×20=20 Marks)**

OR

12. How can you use viruses as a tool to deliver transgene into plant cells. **(1×20=20 Marks)**

MODULE – II

13. Define transgenesis. Give five examples of reporter and selectable marker genes. **(1×20=20 Marks)**

OR

14. Explain with diagram the development of stress tolerant plants. **(1×20=20 Marks)**

MODULE – III

15. Discuss the utility of mammalian cell lines for production of vaccines and monoclonal antibodies. **(1×20=20 Marks)**

OR

16. Explain the maintenance and cloning of cell lines and describe the different methods used for each. **(1×20=20 Marks)**

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