**Reg. No. \_\_\_\_\_\_\_\_**

**Karunya University**

**(Karunya Institute of Technology and Sciences)**

 (Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May 2010**

**Subject Title: INTRODUCTORY BIOTECHNOLOGY Time: 3 hours**

**Subject Code: 09BT242 Maximum Marks: 100**

#### **Answer ALL questions**

**PART – A (10 x 1 = 10 MARKS)**

1. Define Biotechnology.

2. What is plant cell culture technology?

3. What is Cloning vector?

4. What is Cosmids?

5. What is Totipotency?

6. Which is the first cloned mammal?

7. What do you mean by symbiotic nitrogen fixation?

8. What is biofertilizers?

9. Define DNA library.

10. What is the significance of DNA finger printing?

**PART – B (5 x 3 = 15 MARKS)**

11. Explain the achievements of biotechnology.

12. What is Expression vector? Mention its salient features and applications.

13. Write about the transgenic animals.

14. What are the different types of biofertilizers?

15. Explain the principle and applications of Biochips.

**PART – C (5 x 15 = 75 MARKS)**

16. Explain the broad applications of DNA Profiling.

(OR)

17. Describe the applications of biotechnology.

18. Explain the salient features and uses of PBR322, SV40 molecules.

(OR)

19. Write a detailed account on enzymes in gene cloning.

20. Explain the steps in the production of transgenic plants and add notes on herbicide and insect resistant transgenic plants.

(OR)

21. Discuss about the socio-economic issues of biotechnology.

22. Describe about the biological nitrogen fixation in plants.

(OR)

23. Explain about Integrated Nutrient supply and IPM system.

24. Explain in detail about gene therapy.

(OR)

25. Describe about the types and applications of biosensors.