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

**Karunya University**

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

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

**Supplementary Examination - June 2011**

**Subject Title: MOLECULAR BIOLOGY Time: 3 hours**

**Subject Code: 09BT213 Maximum Marks: 100**

#### **Answer ALL questions**

**PART – A (10 x 1 = 10 MARKS)**

1. What is crossing over?

2. Define the term transduction.

3. What is DNA polymerase?

4. Topoisomerase is \_\_\_\_\_\_\_\_\_.

5. RNA polymerase is for?

6. What is Foot printing?

7. Genetic code is \_\_\_\_\_\_\_\_\_.

8. Tertiary base pairs are

9. What are the modes of regulations?

10. Derepressors are \_\_\_\_\_\_\_\_\_.

**PART – B (5 x 3 = 15 MARKS)**

11. Discuss about Mendelian genetics.

12. Explain in brief the mechanism of DNA gyrase.

13. Define foot printing.

14. Write about inhibitors and modifiers in protein synthesis.

15. Discuss on auto regulation

**PART – C (5 x 15 = 75 MARKS)**

16. Describe the Bacteriophage life cycle.

(OR)

17. Discuss in detail about linkage.

18. Briefly discuss about the steps involved in replication of eukaryotic chromosome.

(OR)

19. Elaborate the termination of Replication.

20. Discuss in detail about splicing mechanism.

(OR)

21. Describe the process of enzymatic synthesis of RNA.

22. Describe the process of protein synthesis.

(OR)

23. Explain the steps involved in post translational modifications.

24. Briefly discuss the regulation of synthesis of primary transcripts.

(OR)

25. Elaborate the regulation of rate of overall protein synthesis.