

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2008 - 09)
SUBJECT CODE: ZL/MC/GG54

B.Sc. DEGREE EXAMINATION NOVEMBER 2010
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE : MAJOR CORE
PAPER : GENETIC ENGINEERING
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL QUESTIONS **(10 x 3 = 30)**

1. What is r DNA?
2. Write a short note on Adaptor.
3. What is Colony hybridization?
4. Define Exon.
5. Short note on DNA Probe.
6. What is Fusion protein?
7. What is Taq DNA polymerase and write one of its applications.
8. Interferon – Brief.
9. What is mRNA.
10. Expand – IVF, RFLP.

SECTION – B

ANSWER ANY FIVE QUESTIONS **(5 x 6 = 30)**

11. Write a short note on IPR.
12. Write briefly on different types of restriction enzymes.
13. Enumerate the applications of DNA finger printing in forensic science.
14. Explain various methods of transfer of foreign DNA into the cell.
15. Describe the principles of PCR.
16. Explain the production of hybridoma.
17. Explain the procedure involved in Southern Blotting technique.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 x 20 = 40)

18. What are vectors? Mention their types and significance.
19. Give a detailed account on the transgenic animals and their importance.
20. Explain, how the cloning is done in Eukaryotes.
21. Give an account on Human Genome Project.
