

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2010 – 11)

SUBJECT CODE: ZL/MC/CM54

B.Sc. DEGREE EXAMINATION NOVEMBER 2012
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE : MAJOR CORE
PAPER : CELL AND MOLECULAR BIOLOGY
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

(10 x 3 = 30)

1. What are Plasmodesmata?
2. Write a note on Fimbriae.
3. Explain the term Suicidal bags.
4. Differentiate Exocytosis and Endocytosis.
5. Mention the contribution of Jacob and Monad.
6. Comment on the Satellite DNA.
7. What is Chargaff's rule?
8. Write a note on Karenberg enzyme.
9. Comment on DNA chips.
10. What is a Recon?

SECTION – B

ANSWER ANY FIVE QUESTIONS

(5 x 6 = 30)

11. Differentiate Prokaryotic and Eukaryotic cells.
12. Explain Active transport and Ion pumps.
13. List out the functions of Endoplasmic Reticulum.
14. Explain Operon concept.
15. Describe gene therapy with SCID as an example.
16. Draw the structure of chromosome and write its function.
17. Describe the mechanism of Translation.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 x 20 = 40)

18. Draw the ultra structure of Mitochondrion and enumerate its functions.
19. Give an account on biosynthesis of protein.
20. Write an essay of cell cycle and its regulation.
21. Describe DNA sequencing and its applications.
