

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2015– 2016)

SUBJECT CODE: 15BI/PE/CG14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2015
BIOINFORMATICS
FIRST SEMESTER

COURSE : ELECTIVE

PAPER : CELL BIOLOGY AND GENETICS

TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

I. ANSWER ALL THE QUESTIONS

20 x 1 = 20

1. Pili
2. Pedigree
3. Telomeres
4. Centrioles
5. Barr bodies
6. RNA replicase
7. Spherosomes
8. Plastids
9. Endospores
10. Lamins
11. Tight Junctions
12. Autosomes
13. Phagocytosis
14. Peroxisomes
15. Metaphase
16. Haemophilia
17. Histones
18. Centomere
19. Ribosomes
20. Satellites

SECTION – B

II. ANSWER ANY FOUR QUESTIONS

4x10=40

21. Explain transduction and transformation in bacteria.
22. Make a comparison of the three main components of cytoskeleton.
23. What is genetic mapping? Give an account on two point and three point test cross.
24. Write a brief account on Klinefelter's and Turner's syndrome.
25. What is karyotyping? Give its significance.
26. Give an account on plastids.

SECTION – C

III. ANSWER ANY TWO QUESTIONS

2x20=40

27. Write an account on blood grouping. Add a note on Rh factors.
28. Explain replication in enveloped and naked viruses.
29. Write a detailed account on sex determination.
30. Explain the structural features of Mitochondria. Add note on Krebs cycle and Glycolysis.
