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

SUBJECT CODE: 15BY/PE/HG34

M. Sc. DEGREE EXAMINATION - NOVEMBER 2018
BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ELECTIVE
PAPER : HUMAN GENETICS
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION – A

ANSWER ALL QUESTIONS: **(20 x 1 = 20)**

1. What is Pedigree Analysis?
2. Define Multifactorial inhereitance.
3. Define cell cycle.
4. What do you mean by karyotype?
5. Explain fetoscopy.
6. What are inborn errors of metabolism?
7. What is Inbreeding ?
8. Comment on natural selection.
9. What is an oncogene ?
10. What is an Antioncogene ?
11. Give the symbols used in pedigree chart for monocygotic and dizygotic twins.
12. What is a gene pool?
13. How isPachyteneformed ?
14. What is chromosome abnormality?
15. Give the formula for Mitotic index.
16. What is Genetic counselling?
17. State Hardy-Weinberg equation.
18. What is human migration?
19. What is Chemotherapy
20. Write the significance ofGermline gene therapy.

SECTION – B

ANSWER ANY FOUR QUESTIONS: **(4 x 10 = 40)**

21. What is Sex Linked inheritance? Explain with one example.
22. Comment on Chromosomal abnormalities.
23. What is Postnatal diagnosis?
24. Write notes on Inbreeding and its impact on society.
25. Give an account of the various methods to treat cancer.
26. Briefly Gene Therapy and its applications.
27. Give a detailed account of mitosis and its significance.

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SECTION – C

ANSWER ANY TWO QUESTIONS: (2 X 20 = 40)

28. Define Autosomal inheritance and give an account on the various types of autosomal inheritance.
29. What is Prenatal diagnosis? State any five inborn errors of metabolism in detail.
30. Give an account on Chromosomal banding, add a note on its Nomenclature.
31. Give an account of Human genome project and its significance.

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