STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted during the academic year 2011 – 12)

SUBJECT CODE: 11BY/PE/RB14

M. Sc. DEGREE EXAMINATION, NOVEMBER 2011 **BIOTECHNOLOGY** FIRST SEMESTER

COURSE : ELECTIVE

PAPER : RESEARCI TIME : 3 HOURS : RESEARCH METHODOLOGY AND BIOETHICS

MAX. MARKS: 100

SECTION - A

ANSWER ALL QUESTIONS:

 $(20 \times 1 = 20)$

DEFINE / EXPLAIN THE FOLLOWING.

- 1. Pilot study
- 2. Primary and Secondary Data
- 3. Sampling
- 4. Histogram
- 5. Descriptive and Analytical Research
- 6. Hypothesis testing
- 7. Search Engines
- 8. Level of Significance
- 9. Trade Secretes
- 10. GATT
- 11. WIPO
- 12. Licensing
- 13. Plant Breeders Right
- 14. Risks to Human health by GMO
- 15. BINAS
- 16. Transgene stability
- 17. Bio-safety Level II
- 18. Containment
- 19. Superbug
- 20. Biohazards

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SECTION - B

ANSWER ANY FOUR QUESTIONS:

 $(4 \times 10 = 40)$

- 21. Bring out the details on data presentation by tabular column methods with an example.
- 22. Give the organization of manuscript in reference with any Indian Standard journal.
- 23. Explain IPR with special reference to turmeric.
- 24. Describe various ethical issues in relation with human genetics.
- 25. Narrate the protocol followed in clinical trials for a new drug.
- 26. Explain about various facilities required to perform genetic engineering experiments.

SECTION - C

ANSWER ANY TWO QUESTIONS: DRAW DIAGRAMS WHEREVER NECESSARY: (2 X 20 = 40)

- 27. Describe the general format for getting grants for research from a government funding agency.
- 28. Explain about different protection methods followed in IPR.
- 29. Comment on the pros and cons with reference to Bt Brinjal.
- 30. List out and explain various good laboratory practices followed for rDNA technology experiments.
