STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI -600 086

(For candidates admitted during the academic year 2015–2016)

SUBJECT CODE: 15BY/PE/AB24

M.A / M. Sc. DEGREE EXAMINATION, APRIL 2016 SECOND SEMESTER

COURSE : ELECTIVE

PAPER : APPLICATIONS OF BIOTECHNOLOGY

TIME : 3 HOURS MAX. MARKS: 100

SECTION - A

ANSWER ALL THE QUESTIONS

 $(20 \times 1 = 20)$

- 1. Bioreactor
- 2. Log Phase
- 3. Lyophilization
- 4. Biocatalyst
- 5. Biofertilizer
- 6. Petroplants
- 7. Gasohol
- 8. Biofuel
- 9. Cloning
- 10. Trangenesis
- 11. Herbicides
- 12. Edible vaccines
- 13. Clonal propagation
- 14. Artificial seeds
- 15. Embryogenesis
- 16. Secondary metabolites
- 17. DNA fingerprinting
- 18. Vaccines
- 19. Biosensors
- 20. Genetic disorder

SECTION - B

ANSWER ANY FOUR QUESTIONS IN ABOUT 600 WORDS

 $(4 \times 10 = 40)$

- 21. Explain the applications of enzymes in food industry.
- 22. Write notes on the large scale production of penicillin fermentation technology and state its advantages.
- 23. Explain about mushroom cultivation and list the value of edible mushroom.
- 24. Algal hydrocarbons can replace non renewable energy resources- Justify
- 25. Explain the production, advantages and applications of plantibodies.
- 26. Explain the role of tissue culture techniques in pharmaceutical industry
- 27. Discuss the role of biosensors in medicinal field.

SECTION - C

ANSWER ANY TWO QUESTIONS IN ABOUT 1500 WORDS

 $(2 \times 20 = 40)$

- 28. Elaborate on various screening tests available to diagnose genetic diseases.
- 29. How are herbicide and insect resistance transgenic plants developed? State its advantages.
- 30. Discuss how vermicompost enhances the soil fertility.
- 31. a. Write short notes on the features of a bioreactor.
 - b.Explain about up and down stream processing.
