## 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
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.

