

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

**SUBJECT CODE: 15BY/PE/AB24**

**M.A / M. Sc..M.Com DEGREE EXAMINATION, APRIL 2017**  
**SECOND SEMESTER**

**COURSE : ELECTIVE**  
**PAPER : APPLICATIONS OF BIOTECHNOLOGY**  
**TIME : 3 HOURS**

**MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL THE QUESTIONS**

**(20 x 1 = 20)**

1. Define Fermentation process.
2. Name any two enzymes used in Food Industry.
3. Define downstream processing.
4. Mention any 2 edible mushrooms.
5. What is meant by vermicomposting?
6. Expand VAM.
7. Give 2 examples for petroplants.
8. What is a transgene?
9. Define a clone.
10. What are transgenic animals?
11. Define Callus.
12. What is meant by totipotency?
13. Define Synthetic seeds.
14. What is meant by Micropropagation?
15. Expand RFLP.
16. Define a Biosensor.
17. What are restriction enzymes?
18. What are plantibodies?
19. Give any examples for vaccines.
20. What is meant by southern hybridization?

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS IN ABOUT 600 WORDS**

**(4 x 10 = 40)**

21. Write short note on penicillin production.
22. Briefly discuss the process of edible mushroom cultivation.
23. Write short notes on biofuels.
24. Discuss briefly about Edible vaccines.
25. Write a short note on preparation of synthetic seeds and its application.
26. Write short notes on application of biotechnology in the field of forensic science.
27. What are the different types of biosensors? Explain briefly their applications.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS IN ABOUT 1500 WORDS**

**(2 x 20 = 40)**

28. Discuss in detail the different methods of vermicomposting and their applications with schematic diagram.
29. Write a detailed essay on the methods involved in the production of transgenic animals and their importance.
30. Explain in detail the applications of plant tissue culture.
31. Write a detailed note on different tests performed for screening of genetic diseases.

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