

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600086
(For candidates admitted from the academic year 2023 – 2024 & thereafter)

M. Sc. DEGREE EXAMINATION, APRIL 2026
SECOND SEMESTER

COURSE : ELECTIVE
PAPER : APPLICATIONS OF BIOTECHNOLOGY
SUBJECT CODE : 23BY/PE/AB23
TIME : 3 HOURS

MAX. MARKS: 100

Q. No.	SECTION - A (8 x 1 = 8)	CO	KL
	ANSWER ALL QUESTIONS		
1	What is a fermentor	1	1
2	Define Biofertilizers?	1	1
3	List composting techniques.	1	1
4	List the enzymes involved in food industry.	1	1
5	Give an examples of biofuels.	1	1
6	What is cloning.	1	1
7	Write on transgenic plants?	1	1
8	Give a note on DNA finger printing.	1	1
Q. No.	SECTION - B (6 x 2 = 12)	CO	KL
	ANSWER ALL QUESTIONS		
9	Write the applications of GMOs.	2	2
10	Explain the significance of VAM.	2	2
11	Differentiate upstream and downstream processing.	2	2
12	Justify DNA fingerprinting as a tool for diagnosis.	2	2
13	What are edible vaccines?	2	2
14	Give the substrate used for biogas production.	2	2
Q. No.	SECTION – C (4 x 10 = 40)	CO	KL
	ANSWER ANY FOUR QUESTIONS		
15	Write the production of wine.	3	3
16	What's the procedure for mushroom cultivation ?	3	3
17	How are blue green algae produced in the lab ?	3	3
18	Write the pros and cons of <i>Bt</i> cotton applications.	3	3
19	Explain the production of bio-ethanol.	3	3
20	Write the significance on different marine products from microbes with examples.	3	3

Q. No.	SECTION – D ANSWER ANY TWO QUESTIONS	(2 x 20 = 40)	CO	KL
21	Briefly explain the production of penicillin with diagram.		4	4
22	Elaborate on production of composting and vermicomposting.		4	4
23	Explain in detail on DNA Finger printing.		4	4
24	Outline the cancer therapy.		4	4
