STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86 (For candidates admitted from the academic year 2023 – 2024)

M.Com / M. Sc. DEGREE EXAMINATION, APRIL 2024 DEPARTMENT OF BIOTECHNOLOGY SECOND SEMESTER

COURSE : **ELECTIVE**

PAPER : APPLICATION OF BIOTECHNOLOGY

SUBJECT CODE : 23BY/PE/AB23

TIME : 3 HOURS MAX. MARKS: 100

| | SECTION A | со | KL |
|--------|--|----|----|
| Q. No. | Answer ALL Questions $(8 \times 1 = 8 \text{ marks})$ | | |
| 1 | Define fermentation technology. | 1 | 1 |
| 2 | What is spawning? | 1 | 1 |
| 3 | What is first generation Biofuel? | 1 | 1 |
| 4 | What are clones? | 1 | 1 |
| 5 | List any two marine products from microbes. | 1 | 1 |
| 6 | What is composting? | 1 | 1 |
| 7 | What are edible vaccines? | 1 | 1 |
| 8 | Give two examples of genetic diseases? | 1 | 1 |
| | SECTION – B | СО | KL |
| Q. No. | Answer ALL Questions $(6 \times 2 = 12 \text{ marks})$ | | |
| 9 | Give the Binominal name of yeast and the enzymes | 2 | 2 |
| | produced by yeast. | 2 | |
| 10 | What are Vectors? | 2 | 2 |
| 11 | What are protein factories? | 2 | 2 |
| 12 | Define vermicompost and list its types. | 2 | 2 |
| 13 | Define transgenic animals. Give examples. | 2 | 2 |
| 14 | What are cytotoxic drugs? | 2 | 2 |
| | SECTION C | СО | KL |
| Q. No. | Answer Any FOUR Questions $(4 \times 10 = 40 \text{ marks})$ | | |
| 15 | Predict the steps involved in large scale production of antibiotics. | 3 | 3 |
| 16 | Compute biofertilizer production. | 3 | 3 |
| 17 | Show the production of bioethanol and its importance. | 3 | 3 |

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| 18 | Present the steps involved in the production of transgenic plants with Bt toxin. | 3 | 3 |
|--------|--|----|----|
| 19 | Compile cancer therapy. | 3 | 3 |
| 20 | Relate the applications of genetically modified organisms. | 3 | 3 |
| | SECTION – D | CO | KL |
| Q. No. | Answer Any TWO Questions $(2 \times 20 = 40 \text{ marks})$ | CO | |
| 21 | Outline the methods of production of wine. | 4 | 4 |
| 22 | Examine the steps involved in mushroom cultivation. | 4 | 4 |
| 23 | Investigate the methodology of DNA fingerprinting and its applications. | 4 | 4 |
| 24 | Analyze the production of biogas and its importance. | 4 | 4 |
