

Date:
Registration number:



ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27
B.Sc. MICROBIOLOGY - VI SEMESTER
SEMESTER EXAMINATION: APRIL 2022
(Examination conducted in JULY 2022)
MB 6218 – Microbial Technology

Time- 2 ½ hrs

Max Marks-70

This question paper contains 1 printed page and 4 parts

I. Answer any Five of the following

5x3=15

1. Comment on homopolymer tailing method.
2. Differentiate the blotting techniques.
3. Write the principle of biosensor.
4. List the applications of IPR.
5. Define gene knockout with example.
6. Illustrate the mechanism of delayed fruit ripening.
7. Differentiate T4 and *E.coli* DNA ligases.

II. Answer any Five of the following

5x5=25

8. Illustrate calcium chloride mediated gene transfer.
9. Write a short note on plasmid amplification.
10. Elaborate the production process and application of SCP.
11. Differentiate global and local alignment.
12. Write a flow chart of rota viral vaccine production.
13. Explain the principle of biochips.
14. Describe insulin production.

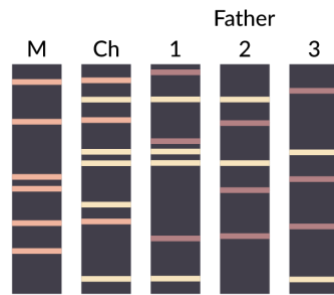
III. Answer any Two of the following

2X10=20

15. Illustrate the mechanism of *Agrobacterium* mediated gene transfer.
16. Give a detailed account on cDNA library.
17. Explain the mechanism and application of GEM in bioremediation process.

IV. Answer the following

1x10=10



Name the experiment. Write the principle, methodology and the interpretation of the same.