

TM244516V

Reg. No :

Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024

2022 ADMISSIONS REGULAR

SEMESTER IV - M. Sc. Food Science And Nutrition

FN4E01TM20 - Food Biotechnology

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

1. Comment on ELSI in Biotechnology.
2. Enlist the major milestones in the phase of 'Modern' Biotechnology.
3. Enlist the major enzymes in gene cloning.
4. What are the applications of Human Genome Project?
5. Enlist enzymes used in HFCS production
6. Differentiate between Flocculation and floatation.
7. Explain the mechanisms of probiotic activity.
8. What are probiotics? Bring out their importance.
9. State the applications of biosensors in various fields.
10. What are Biochips? How does a biochip work?

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Appraise application of genetics in Food Production.
12. Briefly summarise major events in Modern era of evolution of biotechnology.
13. Explain types of animal culture media.
14. Explain in detail solid liquid separations in DSP.
15. What is cell disruption? Explain in detail the various mechanical and chemical methods employed for cell disruption.
16. Name the Organisms involved in vinegar production. Explain the Trickling process .
17. Describe the factors affecting bacterial biomass Production.
18. With the help of a schematic diagram describe the main components of a biosensor.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. Write an essay on applications of genetics in food production.
20. Write an essay on Animal cell culture under a)Technique b)Applications
21. Illustrate a simple Bioreactor . Add a note on it's functioning and applications.
22. Explain steps involved in button mushroom cultivation process.

