LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – **FOOD CHEMISTRY AND FOOD PROCESSING**

THIRD SEMESTER – **NOVEMBER 2018**

BT 3876 – FOOD BIO-TECHNOLOGY

Date: 29-10-2018 Dept. No. Max. : 100 Marks

Time: 09:00-12:00

Part A

Answer all the questions. 10 x 2 =20 marks

1. Define fermentation with its types
2. Highlight the significance of consuming acid fermented dairy products.
3. Mention the role of fungal enzymes in food production.
4. Mention any two uses of chlorella and spirulina.
5. What are surfactants?
6. What is a GM food?
7. Name any one cytokinin used in plant cell culture.
8. What is Dolly?
9. Define totipotency.
10. Expand the following a) APHIS b) FDA

Part B

Answer any eight questions. 8 x 5= 40 marks

11. Enumerate the biotechnological applications of fermentation.
12. Write a note on 16SrRNA sequencing.
13. Discuss the production of any two acid fermented vegetable products.
14. Explain the production of Spirulina
15. Describe the food applications of agar
16. What is alginate? Mention its uses.
17. What is golden rice? How are they produced?
18. Give a short note on the application of algae in food industry.
19. Describe the microinjection technique and its application.
20. Write a brief note on nutraceuticals.
21. Explain the central dogma concept in molecular biology.
22. What are the advantages of producing a genetically modified plant?

Part C

Answer any four questions. 4 x 10 =40 marks

23. Write a detailed note on Mushroom cultivation.
24. Explain in detail on the acid fermented dairy products, with its process flow chart.
25. Discuss the applications of Enzymes in dairy industries.
26. With a neat diagram, explain the structure and functions of DNA.
27. Explain the *Agrobacterium*-mediated gene transfer in plants.
28. Enumerate the different applications of transgenic animals.

$$$$$$$$$