TM153445C **Reg. No:……..**

Name:…….

M. Sc. DEGREE (C.S.S.) EXAMINATION, APRIL 2017
(Supplementary – 2015 Admission)
SEMESTER III – HOME SCIENCE (FOOD SCIENCE AND NUTRITION)
FN3C12TM - FOOD BIOTECHNOLOGY

Time: Three Hours **Maximum Marks: 75**

PART A

I. Write short note on any five questions. Each question carries 3 marks

1. Animal cloning
2. Plant Growth Hormones
3. Intellectual Property Rights
4. Human Genome Project
5. Health benefits of probiotics
6. Down Stream processing
7. Single Cell Protein

(5x3=15)

PART B

II. Answer any six questions. Each question carries 5 marks

8. Give an account of techniques and applications of plant tissue culture
9. Explain the terms: a) Genome b) Genetic Code c) Gene expression
10. Give an account of methods of enzyme immobilization
11. Explain types of fermented Soy based products
12. Give an account of media used in animal cultures
13. Explain the technique of Genetic Modification of Foods
14. Explain nutritional advantages of SCP. Add a note on its production.
15. Explain microbial vitamin production with any suitable example.
16. Explain structure and working of a bioreactor with a suitable diagram

(6x5=30)

PART C

III. Answer any two questions. Each question carries 15 marks

17. Give an account of use of enzymes in Food Production
18. Elaborate on overall metabolic fate of Xenobiotics
19. Give an account of a) Mushroom culture and b) Alcoholic beverage production
20. Explain techniques of Plant tissue Culture. Add a note on culture media also

. **(2x15=30)**