

TM153445A

Reg. No:.....

Name:.....

M. Sc. DEGREE (C.S.S.) EXAMINATION, OCTOBER 2016
SEMESTER III – HOME SCIENCE (FOOD SCIENCE AND NUTRITION)
FN3C12TM – FOOD BIOTECHNOLOGY

Time: Three Hours

Maximum Marks: 75

PART A

I. Write notes on any five questions, not exceeding one page.
Each question carries 3 marks

1. Central Dogma of Molecular Biology
2. Genetic Code
3. Define a) Mutation b) Transcription c) Translation
4. Enzyme immobilization
5. Baker's Yeast
6. SCP as flavour enhancer
7. Bioreactor

(5x 3=15)

PART B

II. Answer any six questions, not exceeding two pages. Each question carries 5 marks

8. Briefly discuss the basic principle of recombinant DNA technology
9. Explain the advantages and disadvantages of GM foods
10. Give an account of media used in animal cultures
11. Discuss in brief the factors affecting fermentation characteristics of a starter culture
12. What are biosensors? How are they useful in detecting toxic pollutants?
13. Enlist the advantages of microbial production of fats
14. Diagrammatically explain the basic steps in making red wine
15. Point out the important features of probiotic microorganisms
16. Write a note on spawn production and mushroom cultivation

(6x5=30)

PART C

III. Answer any two questions, not exceeding three pages.
Each question carries 15 marks

17. Enlist the features of microbial degradation of Xenobiotics and elaborate on the metabolic fate of Xenobiotics
18. Explain the procedure of plant tissue culture in detail
19. Describe the industrial applications of enzymes in food production
20. Give an account of fermentation technology applied on soya based foods

(2x15=30)