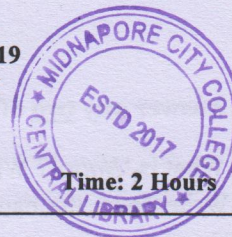


PG (NEW) CBCS
M.Sc. Semester-III Examination, 2019
FOOD SCIENCE & NUTRITION
PAPER: FSN-303
(FOOD PROCESSING)

Full Marks: 40



Time: 2 Hours

1. Answer any four of the following questions:**2×4=8**

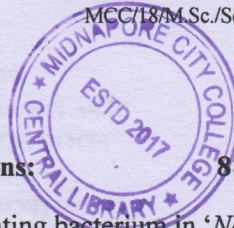
- a) Why ferrous is essential for citric acid production?
- b) What does it mean by good laboratory practices?
- c) Why are the antifoaming agents essential in the fermenter?
- d) What does it mean by sensory evaluation of food?
- e) What is solid state fermentation?
- f) What are the major causes of bread spoilage?
- g) What do you mean by dough retarding?
- h) Write the importance of gluten.

2. Answer any four of the following questions:**4×4=16**

- a) Classify tests for sensory evaluation? Define adhesiveness and cohesiveness. 2+2
- b) Briefly describe 'Hedonic Scale'. Define texture of a food. 2+2
- c) Why is biotin an essential growth factor for glutamic acid production?
- d) Write down the advantages of solid state fermentation. State the functions of ligase and restriction endonuclease. 2+2
- e) Briefly describe the changes of dough during baking.
- f) Write a short note on sponge and dough bread processing.
- g) Write down the lactic acid fermentation. What are homofermentive and heterofermentive lactic acid bacteria? 2+2
- h) Write down the importance of sugar in confectionery.

(P.T.O.)

(2)



3. Answer any two of the following questions: $8 \times 2 = 16$

- a) What is 'Natto'? What is the major fermenting bacterium in 'Natto'?
Write down the name of similar kind of foods found in India and South Korea.
Briefly describe the process of 'Natto' fermentation. $1+1+2+4$
- b) Write down the importance of knock back during dough fermentation.
What types of physical and chemical changes are occurred during dough fermentation? $2+(3+3)$
- c) Write down the preparation process of penicillin production in industry.
How do the strains can be developed for increased production of industrial products? $4+4$
- d) Write down the manufacturing process of any one of the confectionary products. Briefly describe the causes of spoilage of confectionary products. What does it mean by leaveners? What are the raw ingredients in caramels toffees? $2+3+1+2$
