

2017

M. Phil.

2nd Semester Examination

LIFE SCIENCE

PAPER — LSC-125

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

(Food Security and Food Biotechnology)

Answer all questions.

Group - A

1. Answer any *four* questions from the following : 4×2
- (a) What are bacteriocins and how they differ from antibiotics ?
 - (b) What is blanching of fruits and vegetables ?
 - (c) State the utility of hop.
 - (d) What are the conditions of pasturization of milk.

(Turn Over)

- (e) What do you mean by HACCP?
- (f) What is SUFU?

Group - B

2. Answer any *four* questions : 4×4

- (a) Classify fermented foods on the basis of the use of raw materials.
- (b) State the objectives and advantages of food preservation.
- (c) Mention at least four beneficial effects of fermented foods.
- (d) Explain mycotoxins and bacteriocins.
- (e) Describe the process of cheese preparation.
- (f) Mention different factors that control the storage efficacy of food materials.

Group - C

3. Answer any *two* questions : 2×8

- (a) (i) Describe the causative agents of food spoilage.

- (ii) Explain how food spoilage could be minimised. 5+3
- (b) (i) Mention different factors that controls storage efficiency of food materials. 5+3
- (ii) Explain how moisture influences microbial growth in food. 5+3
- (c) (i) "Fermented goods are more health beneficial over non-fermented counterpart"—Justify the statement, highlighting the role of microbial composition.
- (ii) Add a note on functional foods. 5+3
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