

MASTER OF SCIENCE (BIOTECHNOLOGY) (CBCS-2018 COURSE)
M.Sc.(Biotechnology) Sem - III : WINTER :- 2021
SUBJECT: FOOD BIOTECHNOLOGY

Day : Monday
Date 31-01-2022

W-19759-2021

Time : 10:00 AM-11:30 AM
Max. Marks: 30

N.B

- 1) All the questions are **COMPULSORY**.
 - 2) Draw neat- labelled diagrams **WHEREVER** necessary.
 - 3) Figures to the right indicate **FULL** marks.
 - 4) Answer to both the sections should be written in **SAME** answer book.
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SECTION -I

- Q.1** Do as directed (any **FIVE**) **(05)**
- a) Enlist two examples of emulsifiers.
 - b) State two uses of antioxidants.
 - c) Write two types of preservatives with their examples.
 - d) State the importance of food processing.
 - e) Define “food rheology”
 - f) Define “functional foods”
- Q.2** Answer the following (any **TWO**) **(10)**
- a) Briefly explain the term “Nutrigenomics”. Add a note on its role in metabolomics and transcriptomics.
 - b) Define “fortified foods” with suitable examples. Add a note on challenges in food fortification.
 - c) Define “Humectants”. Give examples and explain their applications.

SECTION-II

- Q.3** Do as directed. (any **FIVE**) **(05)**
- a) Name the organisms present in youghurt.
 - b) Write the steps in idli preparation.
 - c) Define “vinegar”.
 - d) What is “active food packaging”?
 - e) What are terpenes? What is their importance?
 - f) Write four categories of food colors.
- Q.4** Answer any **TWO** of the following. **(10)**
- a) Explain the role of biotechnology and molecular techniques to produce high quality mushrooms.
 - b) Justify the need of genetically modified foods. Explain why the genetically modified foods is an issue of public concern.
 - e) Explain in detail the process of cheese making.
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