

T. Y. B. Sc. (Biotechnology) SEM – V (CBCS - 2015 COURSE) :

WINTER - 2018

Subject: Food Biotechnology

Day: Monday
Date: 29/10/2018

W-2018-1185

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) Q1 and Q5 are compulsory.
- 2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
- 3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
- 4) Answers to Both the sections to be written in SEPARATE answer books.
- 5) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Which organism is the main cause of spoilage in pickle and why?
- b) Define water activity.
- c) Name two useful microorganisms present in the food and mention its effect.
- d) Name various bacteria present in sauerkraut and write their beneficial use.
- e) What are thermophiles? Write its significance in food spoilage.
- f) Define z value

Q.2) Answer the following: (5 Marks X 2 = 10)

- a) What are probiotics and explain its uses in food preparation.
- b) Write the importance of pH and moisture content in food spoilage.

Q.3) Explain the following: (5 Marks X 2 = 10)

- a) Explain ideal properties required for yeast in bread making.
- b) Explain the process of Pasteurization

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

- a) SCP
- b) Ice chilling.

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Write in brief methods used for preservation of juices.
- b) Enlist naturally occurring anti-microbial compounds used in food preservation.
- c) What is farmers right?
- d) What is semisolid fermentation?
- e) What is the function of polyethylene in tetra pack?
- f) What is the function of aluminium layer in tetra pack

Q.6) Answer the following: (5 Marks X 2 = 10)

- a) Explain the use of organic acids as food preservatives.
- b) Write the significance of GM food in the current scenario.

Q.7) Explain the following: (5 Marks X 2 = 10)

- a) What is GRAS? Write its significance in food industry.
- b) Write the importance of record keeping in HACCP.

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

- a) Safety assessment of GM food
- b) Organic food.
