

PARUL UNIVERSITY
PARUL INSTITUTE OF APPLIED SCIENCES
MID SEMESTER INTERNAL EXAMINATION, MARCH 2020
B. Sc. Microbiology Semester IV

Paper Name: Food Microbiology

Date: 02 /03/2020

Paper Code: 11101253

Time: 1hr 30min

Max. Marks: 40

Instructions:

1. All questions are compulsory and options are given in first and second question only.
 2. Numbers to the right of question indicate the marks of respective question.
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Q. 1 Attempt any one question of the following. **(08)**

(i) Enlist physical factors influencing destruction of microorganisms.
Explain any one in detail.

(ii) Describe symptoms & prevention of Salmonella food poisoning.

Q. 2 Attempt any three questions of the following. **(12)**

(i) Write a note on fermentation of miso.

(ii) Explain spoilage of any one type of food products.

(iii) Write a note on ergotism.

(iv) Describe general characteristics of *Clostridium botulinum*.

(v) Explain production of vinegar.

Q. 3 Do as directed. Attempt all five questions. **(05)**

(i) What is rancidity? Name its types.

(ii) Define lautering?

(iii) Name the organisms used in yoghurt production.

(iv) What is the difference between food intoxication & food infection

(v) Expand MRSA.

Q. 4 Write correct option in your answer sheet for following 15 multiple choice questions. **(15)**

MCQ 1 The a_w for pure water is

- (A) 1.00 (B) 9.99
(C) 0.9823 (D) 0.1

MCQ 2 *Clostridium perfringens* poison is an

- (A) Exotoxin (B) Enterotoxin during sporulation
(C) endotoxin (D) Enterotoxin during vegetative phase

MCQ 3 Shredded cabbage is the starting product for which of the following fermented food?

- (A) Sauerkraut (B) Pickles
(C) Green olives (D) Sausage

MCQ 4 _____ is the most common probiotic found in food such as yogurt.

- (A) *E. coli* (B) *Enterobacter*
(C) *Lactobacillus* (D) *Shigella*

MCQ 5 Which of the following is not a product of fermentation?

- (A) Lactate (B) Oxygen
(C) Ethanol (D) Carbon dioxide

MCQ 6 An example of perishable food is

- (A) Fruits (B) Fish
(C) Vegetables (D) All of these
- MCQ 7 Which of the following microorganism have a high vitamin content?
(A) Bacteria (B) Yeast
(C) Algae (D) Protozoa
- MCQ 8 'Sarcina sickness' of beer is caused by
(A) *Saccharomyces cerevisiae* (B) *Pediococcus cerevisiae*
(C) *Lactobacillus pastorianus* (D) *Hansenula anomala*
- MCQ 9 Bacterial inoculums is transferred to production media when bacteria are
(A) Metabolically active (B) In dormant stage
(C) In sporulation stage (D) None of the above
- MCQ 10 Main aim of inoculums preparation is
(A) To minimize contamination (B) To increase production
(C) To decrease lag phase of desired organisms (D) All of the above
- MCQ 11 Ergot is obtained from
(A) *Rhizopus* (B) *Claviceps*
(C) *Albugo* (D) *Phytomonas*
- MCQ 12 The Staphylococcal intoxication refers to presence of
(A) An enterotoxin (B) Neurotoxin
(C) Mycotoxin (D) All of these
- MCQ 13 What are the intrinsic factors for the microbial growth?
(A) pH (B) Oxidation-Reduction potential
(C) Moisture (D) All of these
- MCQ 14 Aflatoxin is produced by
(A) *Penicillium* (B) *Neurospora*
(C) *Rhizopus* (D) *Aspergillus*
- MCQ 15 Which of the following is produced by fermentation of milk?
(A) Yogurt (B) Sauerkraut
(C) Tempeh (D) Kombucha

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