



Name :

Roll No. :

Invigilator's Signature :

CS/MHMCT (FBN)/SEM-1/MFBM-103/2012-13

2012

FOOD SAFETY & HYGIENE

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

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

GROUP – A

(Multiple Choice Type Questions)

1. Fill up the blanks with appropriate alternatives. $10 \times 1 = 10$
 - i) Bacteria reproduces by the process of
 - a) Binary fission
 - b) budding
 - c) fragmentation
 - d) asepsis.
 - ii) The pH favorable for the growth of yeasts is
 - a) slightly acidic
 - b) slightly basic
 - c) neutral
 - d) highly acidic.
 - iii) The full form of HACCP is
 - a) Hazard Analysis cost cutting price
 - b) Hazard Analysis Critical control Price.
 - c) Hazard Analysis Critical Control Point.
 - d) Health Analysis Critical care Point.



- iv) is the name of a class II preservative.
- a) Turmeric
 - b) Monosodium glutamate
 - c) Sorbitol
 - d) Salt.
- v) occurs in consumption of improperly canned food.
- a) Botulism
 - b) Salmonellosis
 - c) Typhoid
 - d) Hepatitis.
- vi) PFA was first revised and amended in the year
- a) 1955
 - b) 1965
 - c) 1975
 - d) 2010.
- vii) The adulterant present in cheaper varieties of laddu is
- a) Metanil yellow
 - b) Tartazine
 - c) Lead chromate
 - d) Turmeric.
- viii) Typhoid is caused by
- a) Salmonella typhi
 - b) Clostridium sp.
 - c) Saccharomyces cerevisiae.
 - d) Pseudomonas.
- ix) The group of bacteria which can grow and reproduce in high temperature is known as
- a) Mesophiles
 - b) Halophiles
 - c) Thermophiles
 - d) Lactobacillus.
- x) is an example of beneficial bacteria.
- a) Lactobacillus
 - b) Moraxella
 - c) E.coli
 - d) Alkaligens.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

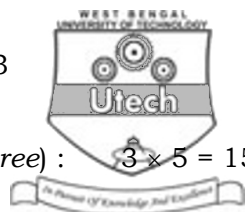
2. Factors Affecting the growth of bacteria
3. 7 principles of HACCP.
4. Differentiate between
 - a) Class I & Class II preservatives
 - b) Sterilization & pasteurization.
5. Blanching is essential before Freezing Explain
6. Causes of Food Spoilage.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. Define Food borne diseases. Discuss the causes of Food borne diseases. Explain in brief about the causes, symptoms, incubation period and preventive measures for Botulism and typhoid. $3 + 4 + 8$
8. Define HACCP. Discuss about the different hazards. Explain the importance of Hazards in a food establishment with a flow diagram. $3 + 5 + 7$



9. Define each of the following in brief (any *three*) : $3 \times 5 = 15$

- a) Risk
- b) Food contamination
- c) Food additives
- d) Brucellosis

10. Define preservation. What are the different methods of preservation in practice. Explain the method of canning in detail. What is sterilization ? Explain the chemical and physical methods of sterilization in detail. $2 + 4 + 3 + 2 + 4$

11. Define adulteration. What is PFA ? What is the test to detect adulteration in turmeric and ghee ? Define food laws. Give an example of Indian and International food standard.

$3 + 2 + 5 + 2 + 3$

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