

# National Testing Agency

**Question Paper Name:** Food Microbiology and Food Safety 26th March 2021 Shift 1

Subject Name: Food Microbiology and Food Safety

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## Food Microbiology and Food Safety

Group Number:

**Group Id:** 864351160

Group Maximum Duration:

Group Minimum Duration:

Show Attended Group?:

No
Edit Attended Group?:

No
Break time:

Group Marks:

100
Is this Group for Examiner?:

No

## Food Microbiology and Food Safety-1

**Section Id:** 864351596

Section Number :

Section type: Online
Mandatory or Optional: Mandatory

Number of Questions: 20

Number of Questions to be attempted:20Section Marks:20Mark As Answered Required?:YesSub-Section Number:1

**Sub-Section Id:** 864351717

**Question Shuffling Allowed:** Yes

Question Number: 1 Question Id: 86435113326 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Which of the following microorganism is most widely used as probiotic?

- 1. Salmonella
- 2. Klebsiella
- 3. Proteus
- 4. Lactobacillus

#### **Options:**

86435144545. 1

86435144546. 2

86435144547. 3

86435144548. 4

Question Number: 2 Question Id: 86435113327 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Which of the following food preservation techniques, involves sealing food in sterilized, airtight containers?

- Drying
- 2. Canning
- 3. Freezing
- 4. Irradiation

### **Options:**

86435144549. 1

86435144550. 2

86435144551.3

86435144552. 4

Question Number: 3 Question Id: 86435113328 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

What is the minimum time required for food workers to wash their hands?

1. 1-5 seconds

2. 5-10 seconds

3. 20-30 seconds

4. 50-60 seconds

#### **Options:**

86435144553. 1

86435144554. 2

86435144555. 3

86435144556. 4

Question Number: 4 Question Id: 86435113329 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which of the following types of radiation plays significant role in preserving food because of an excellent penetration power as well as cheapest form of radiation?

- 1. Alpha-radiation
- 2. Beta-radiation
- 3. Gamma-radiation
- 4. X-ray

### **Options:**

86435144557. 1
86435144558. 2
86435144559. 3
86435144560. 4
Question Number: 5 Question Id: 86435113330 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0
The "Father of Canning" is
1. John Hall
2. Nicolas Appert
3. Robert Koch
4. Louis Pasteur
Options:
86435144561. 1
86435144562. 2
86435144563. 3
86435144564. 4
Question Number: 6 Question Id: 86435113331 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0
The Most Probable Number (MPN) test is performed to confirm the existence of in the drinkable water.
1. Coliforms
2. Yeasts
3. Molds
4. Viruses
<b>Options :</b> 86435144565. 1

86435144566. 2

86435144567.3

86435144568. 4

Question Number: 7 Question Id: 86435113332 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which of the following is the process of anaerobic degradation of proteinaceous materials?

- 1. Fermentation
- 2. Respiration
- 3. Freezing
- 4. Putrefaction

#### **Options:**

86435144569. 1

86435144570. 2

86435144571.3

86435144572.4

Question Number: 8 Question Id: 86435113333 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which of the following microorganisms is considered as non-pathogenic or non-disease causing organism?

- 1. Listeria monocytogenes
- 2. Salmonella typhimurium
- 3. Lactobacillus bulgaricus
- 4. Campylobacter jejuni

#### **Options:**

86435144574. 2

86435144575.3

86435144576.4

Question Number: 9 Question Id: 86435113334 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Which of the following is an example of semiperishable food?

- 1. Onion
- 2. Meat
- 3. Egg
- 4. Sugar

#### **Options:**

86435144577.1

86435144578. 2

86435144579.3

86435144580.4

Question Number: 10 Question Id: 86435113335 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

What is the main objective of pasteurization of milk?

- 1. To impove flavour
- 2. To change color
- 3. To kill disease causing microorganisms
- 4. To enhance nutritional value

#### **Options:**

86435144581.1

86435144582. 2

Question Number: 11 Question Id: 86435113336 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

As per Food Safety & Standards Act, FSMS stands for\_\_\_\_\_

- 1. Food Safety Management System
- 2. Food Safety Mechanization System
- 3. Food Standards Management System
- 4. Food Security Management System

#### **Options:**

86435144585. 1

86435144586. 2

86435144587.3

86435144588. 4

Question Number: 12 Question Id: 86435113337 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following is NOT an intrinsic factor affecting microbial growth?

- 1. pH
- 2. Temperature
- 3. Moisture
- 4. Oxidation-Reduction Potential

## **Options:**

86435144589. 1

86435144590. 2

86435144591.3

Question Number: 13 Question Id: 86435113338 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

What is "asepsis"?

- 1. Reducing the population of microorganisms
- 2. Identifying methods of destruction
- 3. Sterility checks
- 4. Keeping out microorganisms

#### **Options:**

86435144593.1

86435144594. 2

86435144595.3

86435144596.4

Question Number: 14 Question Id: 86435113339 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

Which of the following fungus is known as "bread mold"?

- 1. Mucor
- 2. Penicillium
- 3. Rhizopus
- 4. Aspergillus

## **Options:**

86435144597. 1

86435144598. 2

86435144599.3

86435144600.4

Question Number: 15 Question Id: 86435113340 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

#### **Correct Marks: 1 Wrong Marks: 0**

What is the optimum pH for the growth of most bacteria?

1. 5.0 to 9.0

2. 6.5 to 7.5

3. 9.0 to 9.5

4. 1.0 to 3.5

#### **Options:**

86435144601.1

86435144602. 2

86435144603.3

86435144604.4

Question Number: 16 Question Id: 86435113341 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Botulism is a disease caused by the ingestion of food containing the neurotoxin produced by

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- 1. Clostridium botulinum
- 2. Lactobacillus acidophilus
- 3. Lactobacillus brevis
- 4. Klebsiella pneumoniae

## **Options:**

86435144605.1

86435144606. 2

86435144607.3

86435144608.4

Question Number: 17 Question Id: 86435113342 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which of the following microorganisms is mainly used in bread making process (fermentation)?

- 1. Candida albicans
- 2. Saccharomyces carlsbergensis
- 3. Saccharomyces cerevisae
- 4. Streptococcus thermophillus

#### **Options:**

86435144609. 1

86435144610. 2

86435144611.3

86435144612.4

Question Number: 18 Question Id: 86435113343 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A process in which microorganism converts an organic substance into simpler substances; particularly under the anaerobic conditions (breakdown of sugar into alcohol), termed as

.....

- 1. Spoilage
- 2. Fermentation
- 3. Preservation
- 4. Irradiation

## **Options:**

86435144613. 1

86435144614. 2

86435144615. 3

Question Number: 19 Question Id: 86435113344 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Any change which makes food unfit for human consumption is called \_\_\_\_\_\_.

- 1. Spoilage
- 2. Preservation
- 3. Processing
- 4. Freezing

### **Options:**

86435144617. 1

86435144618. 2

86435144619.3

86435144620.4

Question Number: 20 Question Id: 86435113345 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

**Correct Marks: 1 Wrong Marks: 0** 

What is HACCP system for?

- 1. Identifying the CCPs, including their location, procedure and process
- 2. Accurately monitoring food hygiene hazards
- 3. A systematic analysis of all steps and regular monitoring of the control points
- 4. Physical, Chemical and Biological Hazards

## **Options:**

86435144621. 1

86435144622.2

86435144623.3

## Food Microbiology and Food Safety-2

No

Section Id:	864351597
Section Number :	2
Section type:	Offline
Mandatory or Optional:	Mandatory
Number of Questions:	10
Number of Questions to be attempted:	10
Section Marks:	30
Mark As Answered Required?:	Yes
Sub-Section Number :	1
Sub-Section Id:	864351718

Question Number: 21 Question Id: 86435113346 Question Type: SUBJECTIVE

**Correct Marks: 3** 

**Question Shuffling Allowed:** 

Define the following terms with one example of each:

A. Food Pathogen

B. Functional Food

C. Fermented Milk

Question Number: 22 Question Id: 86435113347 Question Type: SUBJECTIVE

Correct Marks: 3

Define food poisoning. Write the name of three most common microorganisms responsible for food poisoning.

Question Number: 23 Question Id: 86435113348 Question Type: SUBJECTIVE

**Correct Marks: 3** 

What is food safety? Explain, how it is important for public health.

Question Number: 24 Question Id: 86435113349 Question Type: SUBJECTIVE

**Correct Marks: 3** 

How is food contaminated with microorganims? Write the sources of microbial contamination in foods.

Question Number: 25 Question Id: 86435113350 Question Type: SUBJECTIVE

**Correct Marks: 3** 

Write a brief note on:

A. Cross-contamination

B. Coliforms

**Question Number: 26 Question Id: 86435113351 Question Type: SUBJECTIVE** 

**Correct Marks: 3** 

What is canning? Write important steps of canning process.

**Question Number: 27 Question Id: 86435113352 Question Type: SUBJECTIVE** 

Correct Marks: 3

Write a brief note on:

A. Role of FSSAI

B. Biopreservation

**Question Number: 28 Question Id: 86435113353 Question Type: SUBJECTIVE** 

**Correct Marks: 3** 

Describe various intrinsic factors that affect the growth and survival of microorganisms in food.

Question Number: 29 Question Id: 86435113354 Question Type: SUBJECTIVE

**Correct Marks: 3** 

Differentiate in between traditional and rapid microbiological methods for enumerating microorganisms from food.

Question Number: 30 Question Id: 86435113355 Question Type: SUBJECTIVE

**Correct Marks: 3** 

What is hazard? Explain various types of hazards associated with food industry.

## Food Microbiology and Food Safety-3

**Section Id:** 864351598

Section Number: 3

Section type: Offline

Mandatory or Optional: Mandatory

50

Yes

Number of Questions: 7
Number of Ouestions to be attempted: 5

Number of Questions to be attempted : Section Marks :

Mark As Answered Required? :
Sub-Section Number :

**Sub-Section Id:** 864351719

**Question Shuffling Allowed:** No

Question Number: 31 Question Id: 86435113356 Question Type: SUBJECTIVE

**Correct Marks: 10** 

In the Food industry, describe the importance of the following:

A. Starter Cultures

B. Modified Atmosphere Packaging (MAP) Technology

Question Number: 32 Question Id: 86435113357 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Why is food preservation important? Write a brief note on various methods for preserving food.

Question Number: 33 Question Id: 86435113358 Question Type: SUBJECTIVE

**Correct Marks: 10** 

What is food fermentation? Write health benefits of fermented foods.

Question Number: 34 Question Id: 86435113359 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Write the importance of personal hygiene of food workers/handlers and pest control measures in food processing industries.

Question Number: 35 Question Id: 86435113360 Question Type: SUBJECTIVE

**Correct Marks: 10** 

What do you mean by chemical preservative? Describe various chemical preservatives used for preserving foods.

Question Number: 36 Question Id: 86435113361 Question Type: SUBJECTIVE

**Correct Marks: 10** 

Write a short note on:

A. Food adulterant

B. Mycotoxins

C. Spoilage of milk

**Question Number: 37 Question Id: 86435113362 Question Type: SUBJECTIVE** 

**Correct Marks: 10** 

Define microbiological risk analysis. Discuss its signifiance and components in the context of management of public health hazards in foods.