

National Testing Agency

Question Paper Name :	Food Microbiology and Food Safety 28th August 2021 Shift1
Subject Name :	Food Microbiology and Food Safety
Creation Date :	2021-08-28 19:32:26
Duration :	180
Total Marks :	100
Display Marks:	Yes

Food Microbiology and Food Safety

Group Number :	1
Group Id :	603489175
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No

Food Microbiology and Food Safety-1

Section Id :	603489247
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	603489476
Question Shuffling Allowed :	Yes

Question Number : 1 Question Id : 60348912929 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following processes can prevent self-decomposition of vegetables?

1. Heating
2. Washing
3. Blanching
4. Cleaning

Options :

60348949079. 1

60348949080. 2

60348949081. 3

60348949082. 4

Question Number : 2 Question Id : 60348912930 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is an ideal temperature for the growth of human pathogens?

1. 100°C
2. 37°C
3. 0°C
4. 47°C

Options :

60348949083. 1

60348949084. 2

60348949085. 3

60348949086. 4

Question Number : 3 Question Id : 60348912931 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The water activity (a_w) of pure water is _____.

1. 0.1
2. 1.00
3. 0.98
4. 9.99

Options :

60348949087. 1

60348949088. 2

60348949089. 3

60348949090. 4

Question Number : 4 Question Id : 60348912932 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following organisms can grow over a wider range of pH?

1. Molds
2. Bacteria
3. Yeasts
4. Thermophilc anaerobes

Options :

60348949091. 1

60348949092. 2

60348949093. 3

60348949094. 4

Question Number : 5 Question Id : 60348912933 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following organisms is responsible for production of red pigmentation on spoilt food?

1. Serratia
2. Salmonella
3. Lactobacillus
4. Escherichia

Options :

60348949095. 1

60348949096. 2

60348949097. 3

60348949098. 4

Question Number : 6 Question Id : 60348912934 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of fermented food?

1. Bread
2. Bacterium
3. Virus
4. Yeast

Options :

60348949099. 1

60348949100. 2

60348949101. 3

60348949102. 4

Question Number : 7 Question Id : 60348912935 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Clostridium botulinum is a _____.

1. Mold
2. Bacterium
3. Virus
4. Yeast

Options :

60348949103. 1

60348949104. 2

60348949105. 3

60348949106. 4

Question Number : 8 Question Id : 60348912936 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following methods can be used to delay sprouting in potatoes without any loss of nutritional value?

1. Drying
2. Irradiation
3. Heating
4. Dehydration

Options :

60348949107. 1

60348949108. 2

60348949109. 3

60348949110. 4

Question Number : 9 Question Id : 60348912937 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following gas is used in the wine industry to sanitize equipment and to reduce the normal flora of the Grape Must?

1. Carbon dioxide
2. Oxygen
3. Helium
4. Sulfur dioxide

Options :

60348949111. 1

60348949112. 2

60348949113. 3

60348949114. 4

Question Number : 10 Question Id : 60348912938 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following bacterium is responsible for the Cholera?

1. Vibrio cholerae
2. Lactobacillus acidophilus
3. Proteus vulgaris
4. Klebsiella pneumoniae

Options :

60348949115. 1

60348949116. 2

60348949117. 3

60348949118. 4

Question Number : 11 Question Id : 60348912939 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Perishable foods should not be allowed to stand at room temperature for more than _____.

1. 8 hours
2. 2 hours
3. 6 hours
4. 10 hours

Options :

60348949119. 1

60348949120. 2

60348949121. 3

60348949122. 4

Question Number : 12 Question Id : 60348912940 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Citric acid is used as _____.

1. Flavoring agent in food
2. Antioxidant
3. Preservative
4. Flavoring agent, Antioxidant and Preservative

Options :

60348949123. 1

60348949124. 2

60348949125. 3

60348949126. 4

Question Number : 13 Question Id : 60348912941 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following processes of heating milk to kill pathogenic microorganisms is commonly used by dairy industries?

1. Irradiation
2. Sterilization
3. Pasteurization
4. Disinfection

Options :

60348949127. 1

60348949128. 2

60348949129. 3

60348949130. 4

**Question Number : 14 Question Id : 60348912942 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No**

Correct Marks : 1 Wrong Marks : 0

Which of the following foods contains high levels of Lysozyme (an important antimicrobial substance)?

1. Fruits
2. Eggs
3. Vegetables
4. Fish

Options :

60348949131. 1

60348949132. 2

60348949133. 3

60348949134. 4

**Question Number : 15 Question Id : 60348912943 Question Type : MCQ Option Shuffling : No
Is Question Mandatory : No**

Correct Marks : 1 Wrong Marks : 0

Which of the following foods is NOT made by fermentation?

1. Orange juice
2. Cheese
3. Bread
4. Beer

Options :

60348949135. 1

60348949136. 2

60348949137. 3

60348949138. 4

Question Number : 16 Question Id : 60348912944 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The outbreaks detected in foods from food manufacturing units are due to which of the following factor?

1. Inadequate refrigeration
2. Contamination of food during preparation
3. Contamination of food during packaging
4. Inadequate refrigeration, contamination of food during preparation and packaging

Options :

60348949139. 1

60348949140. 2

60348949141. 3

60348949142. 4

Question Number : 17 Question Id : 60348912945 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

During storage of food products, the freezing temperatures actually _____.

1. Kill microorganisms
2. Prevent microorganisms from growing/multiplication
3. Slow down the action of microorganisms
4. Prevent microorganisms from growing/multiplication and slow down metabolic activities

Options :

60348949143. 1

60348949144. 2

60348949145. 3

60348949146. 4

Question Number : 18 Question Id : 60348912946 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Most spoilage bacteria grow at _____.

1. Acidic pH
2. Alkaline pH
3. Neutral pH
4. Any of the pH

Options :

60348949147. 1

60348949148. 2

60348949149. 3

60348949150. 4

Question Number : 19 Question Id : 60348912947 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Who is called the "Father of Canning"?

1. John Hall
2. Nicolas Appert
3. Robert Koch
4. Louis Pasteur

Options :

60348949151. 1

60348949152. 2

60348949153. 3

60348949154. 4

Question Number : 20 Question Id : 60348912948 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following microorganisms is used as an indicator of fecal pollution in water?

1. Escherichia coli
2. Clostridium tetani
3. Clostridium botulinum
4. Cyanobacteria

Options :

60348949155. 1

60348949156. 2

60348949157. 3

60348949158. 4

Food Microbiology and Food Safety-2

Section Id : 603489248

Section Number : 2

Section type : Offline

Mandatory or Optional : Mandatory

Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	30
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	603489477
Question Shuffling Allowed :	No

Question Number : 21 Question Id : 60348912949 Question Type : SUBJECTIVE

Correct Marks : 3

Write a note on starter cultures for food fermentation.

Question Number : 22 Question Id : 60348912950 Question Type : SUBJECTIVE

Correct Marks : 3

Write a brief note on health benefits associated with the consumption of fermented foods.

Question Number : 23 Question Id : 60348912951 Question Type : SUBJECTIVE

Correct Marks : 3

Mention techniques (write name only) used to enumerate microorganisms from food samples.

Question Number : 24 Question Id : 60348912952 Question Type : SUBJECTIVE

Correct Marks : 3

Write in short about the following:

A. Cross-contamination

B. Water activity (a_w)

Question Number : 25 Question Id : 60348912953 Question Type : SUBJECTIVE

Correct Marks : 3

Differentiate between Pasteurization and Sterilization.

Question Number : 26 Question Id : 60348912954 Question Type : SUBJECTIVE

Correct Marks : 3

What do you mean by Hurdle Technology? Explain briefly an importance of hurdle technology in food preservation.

Question Number : 27 Question Id : 60348912955 Question Type : SUBJECTIVE

Correct Marks : 3

Expand and briefly explain the following terms:

- A. FSMS
- B. FSSAI
- C. HACCP

Question Number : 28 Question Id : 60348912956 Question Type : SUBJECTIVE

Correct Marks : 3

Give one example for each of the following:

- A. Mycotoxin
- B. Coliform
- C. Chemical Preservative

Question Number : 29 Question Id : 60348912957 Question Type : SUBJECTIVE

Correct Marks : 3

Why is food preservation important? Explain.

Question Number : 30 Question Id : 60348912958 Question Type : SUBJECTIVE

Correct Marks : 3

Write a note on Canning.

Food Microbiology and Food Safety-3

Section Id :	603489249
Section Number :	3
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	7
Number of Questions to be attempted :	5
Section Marks :	50
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Sub-Section Number :	1
Sub-Section Id :	603489478
Question Shuffling Allowed :	No

Question Number : 31 Question Id : 60348912959 Question Type : SUBJECTIVE

Correct Marks : 10

Discuss following in context to food safety:

A. Pest control requirements in food industry

B. Predictive modelling for food spoilage

Question Number : 32 Question Id : 60348912960 Question Type : SUBJECTIVE

Correct Marks : 10

Explain various methods for controlling spoilage of food.

Question Number : 33 Question Id : 60348912961 Question Type : SUBJECTIVE

Correct Marks : 10

Explain steps for investigation of foodborne illnesses outbreaks.

Question Number : 34 Question Id : 60348912962 Question Type : SUBJECTIVE

Correct Marks : 10

Explain various extrinsic factors affecting growth and survival of microorganisms in food.

Question Number : 35 Question Id : 60348912963 Question Type : SUBJECTIVE

Correct Marks : 10

What do you mean by Modified Atmosphere Packaging (MAP) technology? Explain its importance in food preservation.

Question Number : 36 Question Id : 60348912964 Question Type : SUBJECTIVE

Correct Marks : 10

Explain the following:

A. Microbiological Risk Assessment (MRA)

B. Food Irradiation

Question Number : 37 Question Id : 60348912965 Question Type : SUBJECTIVE

Correct Marks : 10

Write a note on methods to preserve food.