

National Testing Agency

Question Paper Name :	Food Microbiology and Food Safety 29th Sep 2020 Shift 2
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Food Microbiology and Food Safety

Group Number :	1
Group Id :	899514132
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 :	899514176
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	20

Mark As Answered Required? : Yes
Sub-Section Number : 1
Sub-Section Id : 899514217
Question Shuffling Allowed : Yes

**Question Number : 1 Question Id : 89951411345 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0**

Which of the following packaging material is chemically inert and most suitable for packaging low acid food?

1. Metal
2. Paper
3. Glass
4. Plastics

Options :

- 89951444442. 1
- 89951444443. 2
- 89951444444. 3
- 89951444445. 4

**Question Number : 2 Question Id : 89951411346 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0**

A food preservation technique which involves sealing food in sterilized, airtight containers is called_____.

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

Options :

- 89951444446. 1
- 89951444447. 2
- 89951444448. 3
- 89951444449. 4

Question Number : 3 Question Id : 89951411347 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is a source of chemical contamination?

1. Yeast
2. Dairy Products
3. Insecticides
4. Product Packaging

Options :

- 89951444450. 1
- 89951444451. 2
- 89951444452. 3
- 89951444453. 4

Question Number : 4 Question Id : 89951411348 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What are the basic steps for washing hands?

1. Wash thoroughly with water and dry
2. Apply soap, wash thoroughly, rinse and use paper towels
3. Apply soap, wash thoroughly
4. Apply soap, wash partially

Options :

- 89951444454. 1
- 89951444455. 2
- 89951444456. 3
- 89951444457. 4

Question Number : 5 Question Id : 89951411349 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Which of the following at the greatest risk for foodborne illness?

1. Infants and children
2. Pregnant woman
3. Immunocompromised individuals
4. All of these

Options :

- 89951444458. 1
- 89951444459. 2
- 89951444460. 3
- 89951444461. 4

Question Number : 6 Question Id : 89951411350 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Sauerkraut is the fermented product of_____.

1. Cabbage
2. Turnip
3. Reddish
4. Beetroot

Options :

- 89951444462. 1
- 89951444463. 2
- 89951444464. 3
- 89951444465. 4

Question Number : 7 Question Id : 89951411351 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Vinegar is chemically_____.

1. acetic acid
2. lactic acid
3. sorbic acid
4. nitric acid

Options :

89951444466. 1
89951444467. 2
89951444468. 3
89951444469. 4

Question Number : 8 Question Id : 89951411352 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is/are factors affecting the safety of food?

- 1.Changing demographics
- 2.Lifestyle and demand of consumers
- 3.Emergency of new pathogenic microorganisms
- 4.All of these

Options :

89951444470. 1
89951444471. 2
89951444472. 3
89951444473. 4

Question Number : 9 Question Id : 89951411353 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Pasteurization is named after its inventor_____.

1. Louis Pasteur
2. Robert Koch
3. Nicolas Appert
4. A V Leeuwenhoek

Options :

- 89951444474. 1
- 89951444475. 2
- 89951444476. 3
- 89951444477. 4

Question Number : 10 Question Id : 89951411354 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Temperature used in UHT treatment of milk is_____.

1. 90-100°C
2. 100-120°C
3. 120-125°C
4. 135-140°C

Options :

- 89951444478. 1
- 89951444479. 2
- 89951444480. 3
- 89951444481. 4

Question Number : 11 Question Id : 89951411355 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Yeast are added to sourdough bread to _____.

1. Produce gases
2. Produce lactic acid
3. Preserve the dough
4. Precipitate milk proteins

Options :

- 89951444482. 1
- 89951444483. 2
- 89951444484. 3
- 89951444485. 4

Question Number : 12 Question Id : 89951411356 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is not a product of fermentation?

- 1. Lactate
- 2. Oxygen
- 3. Ethanol
- 4. Carbon dioxide

Options :

- 89951444486. 1
- 89951444487. 2
- 89951444488. 3
- 89951444489. 4

Question Number : 13 Question Id : 89951411357 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Detrimental effects of microorganisms in food include_____.

- 1. flavouring
- 2. spoilage
- 3. fermentation
- 4. providing protein

Options :

- 89951444490. 1
- 89951444491. 2
- 89951444492. 3
- 89951444493. 4

Question Number : 14 Question Id : 89951411358 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The yoghurt is made from_____.

1. *Lactobacillus bulgaricus*
2. *Streptococcus thermophilus*
3. *S. cremoris*
4. mixed culture of (a) and (b)

Options :

89951444494. 1

89951444495. 2

89951444496. 3

89951444497. 4

Question Number : 15 Question Id : 89951411359 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Baking powder contains_____.

1. NaCl
2. NaHCO_3
3. Na -benzoate
4. NaI

Options :

89951444498. 1

89951444499. 2

89951444500. 3

89951444501. 4

Question Number : 16 Question Id : 89951411360 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In anaerobic (without O₂) environment, the sugar in dough is converted into_____.

1. glucose
2. water
3. alcohol
4. carbon monoxide

Options :

- 89951444502. 1
- 89951444503. 2
- 89951444504. 3
- 89951444505. 4

Question Number : 17 Question Id : 89951411361 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For modifying atmosphere inside food package, it is needed to lower an amount of oxygen moving it from 21 % to approximately_%.

1. 0
2. 5
- 3.10
4. 15

Options :

- 89951444506. 1
- 89951444507. 2
- 89951444508. 3
- 89951444509. 4

Question Number : 18 Question Id : 89951411362 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

_____ is used for discarding spoiled part of food particularly for fruits and vegetables.

1. Trimming
2. Filtration
3. Centrifugation
4. Washing

Options :

- 89951444510. 1
- 89951444511. 2
- 89951444512. 3
- 89951444513. 4

Question Number : 19 Question Id : 89951411363 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which is not an example of Class I (natural) food preservative?

1. Salt
2. Sugar
3. Spices
4. Sorbates

Options :

- 89951444514. 1
- 89951444515. 2
- 89951444516. 3
- 89951444517. 4

Question Number : 20 Question Id : 89951411364 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Presence of _____ considered as an indicator of fecal contamination.

1. *E.coli*
2. *Bacillus*
3. *Proteus*
4. *Lactobacillus*

Options :

- 89951444518. 1
- 89951444519. 2
- 89951444520. 3
- 89951444521. 4

Food Microbiology and Food Safety-2

Section Id :	899514177
Section Number :	2
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	7
Number of Questions to be attempted :	5
Section Marks :	30
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	899514218
Question Shuffling Allowed :	No

Question Number : 21 Question Id : 89951411365 Question Type : SUBJECTIVE

Correct Marks : 6

Define the following terms:

- a. Probiotics
- b. Blanching
- c. Mycotoxin
- d. Canning
- e. Biological hazard
- f. Cross-contamination

Question Number : 22 Question Id : 89951411366 Question Type : SUBJECTIVE

Correct Marks : 6

What is food spoilage? How it is identified in below listed foods and enlist the microorganisms involved in:

- a. Milk
- b. Bread
- c. Meat

Question Number : 23 Question Id : 89951411367 Question Type : SUBJECTIVE

Correct Marks : 6

What do you mean by food irradiation? Explain, how it is useful in food preservation.

Question Number : 24 Question Id : 89951411368 Question Type : SUBJECTIVE

Correct Marks : 6

What do you understand by hurdle technology? Explain, how it is beneficial in preservation of food.

Question Number : 25 Question Id : 89951411369 Question Type : SUBJECTIVE

Correct Marks : 6

What is foodborne illness? Write four organisms responsible for food poisoning.

Question Number : 26 Question Id : 89951411370 Question Type : SUBJECTIVE

Correct Marks : 6

Why pest control measures are important for every food service establishment? Explain briefly.

Question Number : 27 Question Id : 89951411371 Question Type : SUBJECTIVE

Correct Marks : 6

What is modified atmosphere packaging (MAP) technology? Explain briefly.

Food Microbiology and Food Safety-3

Section Id :	899514178
Section Number :	3
Section type :	Offline
Mandatory or Optional :	Mandatory
Number of Questions :	7
Number of Questions to be attempted :	5
Section Marks :	50
Mark As Answered Required? :	Yes
Sub-Section Number :	1
Sub-Section Id :	899514219
Question Shuffling Allowed :	No

Question Number : 28 Question Id : 89951411372 Question Type : SUBJECTIVE

Correct Marks : 10

What do you mean by an indicator organisms? Describe characteristics of an ideal indicator organism. Enlist commonly used indicator organisms.

Question Number : 29 Question Id : 89951411373 Question Type : SUBJECTIVE

Correct Marks : 10

Describe various extrinsic factors that affecting the growth of microorganisms in food.

Question Number : 30 Question Id : 89951411374 Question Type : SUBJECTIVE

Correct Marks : 10

Enlist the 'General Principles of Food Preservation' and explain each principle with suitable example.

Question Number : 31 Question Id : 89951411375 Question Type : SUBJECTIVE

Correct Marks : 10

What is HACCP? Discuss its relevance in context of food safety.

Question Number : 32 Question Id : 89951411376 Question Type : SUBJECTIVE

Correct Marks : 10

What is starter culture? Enlist some important starter cultures used in dairy industry.

Question Number : 33 Question Id : 89951411377 Question Type : SUBJECTIVE

Correct Marks : 10

How food is contaminated with pathogenic organisms? Explain how sanitation and hygiene can be maintained in a food processing plant?

Question Number : 34 Question Id : 89951411378 Question Type : SUBJECTIVE

Correct Marks : 10

Write a brief note on:

- a) Microbiological risk assessment in food
- b) Predictive microbiology
- c) Food Safety Management System (FSMS)
- d) Traditional methods of enumeration of microorganisms in food
- e) Chemical preservatives