higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

N1460**(E)**(J12)H

NATIONAL CERTIFICATE

SANITATION AND SAFETY N4

(8060094)

12 June 2018 (X-Paper)
09:00–12:00

This question paper consists of 10 pages.

Copyright reserved

DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
SANITATION AND SAFETY N4
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Write neatly and legibly.

Copyright reserved

SECTION A

QUESTION 1

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 Where should raw meats be stored in a refrigerator?

A At the top
B In the middle
C At the bottom, below all the other food
D In the coldest area of the fridge

1.2 Which of the following meats are safe to eat when they are pink or raw?

A Chicken
B Pork
C Minced meat
D Lamb

1.3 Tuberculosis germs are found in a person's …

A urine.
B sputum.
C blood.
D perspiration.

1.4 What is the reason for drying your hands after washing them?

A So that you do not drip water everywhere.
B Because germs and bacteria are more easily spread with wet hands.
C Your hands are slippery when wet, and you will not be able to hold the kitchen utensils properly.
D To follow organisational instructions.

1.5 Which of the following is true about bacteria?

A Bacteria multiplies and grows faster in warm environments.
B Bacteria needs air to survive.
C Every type of bacteria can give people food poisoning.
D By freezing food, you can kill bacteria.

1.6 Which of the following does bacteria need to assist it to grow and multiply:

A Water
B Food
C Warm temperature
D All of the above

Copyright reserved

1.7 In case of an accident happening, what action should you take?

A Stay calm so you can think clearly and respond quickly.
B Call for help if you need to.
C In the case of poisoning, immediately call the nearest poison control centre.
D All of the above.

1.8 In a place of work, the best way to dry your hands after washing them is to …

A use a cotton towel.
B just shake excess water away.
C use an air dryer.
D use paper towel.

1.9 How do you know if a beef burger has been properly cooked and is safe to eat?

A After cutting it in half and you see the inside is red, you then know it has been cooked properly.
B If you can see that it is burnt then you know it is safe.
C If you can see the outside of the burger is evenly brown and when you cut it in the middle you can see that the meat is no longer pink.
D If you have cooked it for 10 minutes.

1.10 To stop severe bleeding of a wound one must …

A cover the wound with a cloth and firmly press down.
B wash blood out off it.
C follow the right procedures.
D apply a bandage.

(10 × 2) **[20]**

Copyright reserved

QUESTION 2

2.1 Use a description from COLUMN B that matches a word or term in COLUMN A. Write down only the letter (A–J) next to the question number (2.1.1–2.1.10) in your ANSWER BOOK.

COLUMN A		COLUMN B	
2.1.1	Scale	A	chemical substance used to remove grease, dirt and debris
2.1.2	Disinfectant	B	complete removal of food soil using a detergent or suitable chemicals
2.1.3	Detergent	C	any process that kills or eliminates agents such as fungi, bacteria and viruses
2.1.4	Sterilant	D	gelatine like substance used to culture medium for various organisms
2.1.5	Sanitiser	E	deposition of mineral salts from hard water
2.1.6	Cleaning	F	specialised chemical capable of eliminating all forms of microbial life and their spores
2.1.7	Sterilization	G	any chemical used in sanitising or disinfection
2.1.8	Agar	H	apparatus used to sterilise objects by making use of steam
2.1.9	Autoclaving	I	making use of vapour steam to clean, sanitise and disinfect
2.1.10	Steam cleaning	J	chemical agent used to destroy disease causing bacteria, microorganisms, excluding spore

(10 × 2) (20)

2.2 There are several storage areas in a kitchen. Give the temperature ranges of each storage area.

STORAGE AREA	TEMPERATURE RANGE	
Cool room	2.2.1	(2)
Refrigerator or Cold room	2.2.2	(2)
Dry Stores	2.2.3	(2)
Freezer	2.2.4	(2)

(8)

2.3 State the danger zone temperatures. (2)

[30]

TOTAL SECTION A: 50

SECTION B

QUESTION 3

A BBC investigation found bacteria with traces of faeces on the ice served in a branch of a well-known fast food chain. Since most UK restaurants don't have to display their hygiene rating, how can you tell you're not at risk of food poisoning, asks Rob Unsworth.

When you go into a restaurant or a takeaway, you might spot a bright green sticker on the door or the window telling you its food hygiene rating.

It's a very helpful steer on whether or not the standards inside are up to scratch - or at least it should be. But in fact - though you might have assumed otherwise - restaurants are not obliged to display their rating in England, Scotland and Northern Ireland.

In other words, any place that scored particularly badly doesn't have to tell you about it. So short of actually poking your head into the kitchen, how can you tell if a restaurant is clean as a whistle - or no such thing?

Anywhere serving food - from the poshest restaurants, to burger vans and everything in between - is subject to on-the-spot checks by environmental health officers, with the best standards rewarded with a maximum rating of five.

All scores are available online, on the website of the Food Standards Agency (FSA). But that's little use if you're choosing where to eat on the hoof and don't have a smartphone on hand - when being able to see a restaurant or cafe's hygiene rating may well influence your decision.

Copyright reserved

On a street in London's Soho with 34 restaurants visited by BBC One's consumer series Rip Off Britain: Food, only nine displayed their hygiene rating.

In February 2016, there were 14,251 food outlets across the UK scoring a rating of just two or below - that's nearly 9% of all premises inspected.

Worse still - 973 of these scored zero on the rating scale - which means they need "urgent improvement".

Among them will typically be branches of some of the country's most familiar names.

Rip Off Britain inspected branches of five well-known chains that had recently received the lowest possible rating, to see if things had since improved.

Undercover researchers visited a branch of Costa in Loughborough, Leicestershire, the Chicken Cottage in Hampstead, north London, a Caffe Nero in Bath, the Wimpy in Basildon, Essex, and a KFC in Birmingham.

The samples were then sent to a lab at Leeds Beckett University for analysis.

While the results in most cases turned up only low or harmless levels of bacteria, that wasn't the case at the KFC branch in Birmingham's Martineau Place - which, only weeks earlier, had temporarily closed for a deep clean following its zero rating.

Samples from all the public areas tested - such as tables, serving areas and doors - came back clean. But in each establishment visited, the Rip Off Britain team had also asked for a cup of tap water with ice, as that can be an good indicator of standards behind the scenes.

And at KFC, the ice was found to have high levels of what scientists call faecal coliforms - germs showing traces of faeces.

Dr Margarita Gomez Escalada, who examined the results at Leeds Beckett University, says: "We found high levels of bacteria in the ice. The presence of faecal coliform suggests that there's faecal contamination either on the water that made the ice, or the ice itself, and so it increases the risk of getting sick from consuming this ice."

KFC says it was "extremely disappointed" by the ice test results. It had "immediately launched an investigation", as well as undertaking "a retraining programme with all team members on our standards for touch point cleaning and procedures".

The restaurant chain adds that following a re-inspection this branch now has "the highest possible mark of five out of five", and it takes "food safety and hygiene extremely seriously".

The other establishments the team visited have also now been re-inspected under the Food Hygiene Rating Scheme, introduced in England and Wales in 2010 - Scotland already had a similar scheme. This time, environmental health officers gave them scores of either four, or the maximum five.

Copyright reserved

In Wales, all businesses must by law display the sticker that shows their hygiene rating in a prominent place. Catriona Stewart, head of the FSA's Food Hygiene Ratings Scheme, says the FSA wants the rest of the UK to follow suit, and it's currently assembling the evidence that it hopes will persuade the government to introduce legislation to that effect.

"We need to be able to show that it doesn't have an additional burden on food businesses, and we'll be putting that case to the government," she says.

In the meantime, how can diners eating on the hoof somewhere that doesn't display its hygiene rating get a sense of how clean it is? John Thornhill, who owns a tapas restaurant rated five in central London, says fresh flowers are usually a good sign - if owners care enough to put them out "there's still some love there". Also, he suggests: "I would ask your server what their favourite dish is. If you get a response that talks about the latest seasonal changes and how they tried this as a group last week, chances are you're in a good situation. If you get the impression that they never eat there, you probably shouldn't either."

Food safety and hygiene expert Dr Lisa Ackerley recommends the time-honoured route of checking the loos. "Go in the toilets, see what it looks like in there, if they can't get that right, I'm sure they won't have got the kitchen right," she says.
Correction: An earlier version of this story incorrectly stated that the BBC team visited KFC after a re-inspection in which it had received the maximum hygiene rating.
Subscribe to the BBC News Magazine's email newsletter to get articles sent to your inbox.

3.1 State THREE reasons or causes for food causing food poisoning. (3)

3.2 One of the reasons for the restaurants and fast food outlets reaching low hygiene scores could be that the staff presented poor personal hygiene.

Explain the personal care of the following:

3.2.1 Care of hands and nails

3.2.2 Hair care

(2 × 5) (10)

3.3 It may be clear that staff do not know how to wash their hands properly before starting work. Use the SEVEN points on how to wash your hands.

Design a small poster in your answer book which could be used within an industrial kitchen. (10)

3.4 Pests could have been another problem within these outlets.

Name and explain THREE ways on how to eradicate pests and explain each one. (3 × 4) (12)

3.5 Define the term *hygiene*. (2)

3.6 State SIX hygiene procedures within the storage areas of a kitchen. (6)

3.7 When the floors and work surfaces are designed for a kitchen it is important to keep hygiene in mind.

Explain the hygiene design of work surfaces and floors. (4)

3.8 Micro-organisms might also be present within this kitchen, therefore the low hygiene rating.

State THREE characteristics of microorganisms. (3)

[50]

QUESTION 4

4.1 Name SIX factors which influence the growth of micro-organisms. (6)

4.2 The article states that Environmental Health Officers can come and do spot checks for cleanliness.

Name and explain THREE on the spot checks that can be completed. (3 × 2) (6)

4.3 Discuss the following food spoilage microorganisms:

4.3.1 Algae (3)

4.3.2 Yeasts (4)

4.3.3 Protozoa (4)

4.4 One of the main reasons the Environmental Health Officers scored the outlets low was because most of them did not have an Emergency Plan in place.

Discuss the EIGHT principles of emergency planning. (8)

4.5 Explain SIX safety measures that should be kept in mind when handling knives. (6)

4.6 Food poisoning makes customers very ill. Explain FIVE ways in which to break the food poisoning chain. (5)

4.7 Name THREE ways in which micro-organisms can be destroyed. (3)

4.8 Explain FIVE effects that hallucinogens have on the body. (5)

[50]

Copyright reserved

QUESTION 5

5.1 Explain how tuberculosis (TB) is spread from one person to the next. (3)

5.2 Name any THREE sign or symptoms of TB. (3)

5.3 What effects do the following toxic agents have on the body?

5.3.1 Drugs

5.3.2 Caffeine

5.3.3 Tannin

5.3.4 Alcohol

5.3.5 Nicotine

(5 × 4) (20)

5.4 Name the FOUR main microorganisms which cause food poisoning. (4)

5.5 Explain the procedures to follow if an accident happens within the food industry. (7)

5.6 What are the main causes of accidents within the workplace? (5)

5.7 A cleaning routine must follow the procedure to achieve a desirable level of cleanliness.

Name THREE cleaning routines and explain each of them. (3 × 2) (6)

5.8 Name TWO methods in using water to clean within the workplace. (2)

[50]

TOTAL SECTION B: 150
GRAND TOTAL: 200

Copyright reserved