RSPH LEVEL 3 AWARD IN UNDERSTANDING HOW TO DEVELOP A HACCP PLAN

Paper: SPECIMEN

IMPORTANT READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. **This paper must be left on your desk at the end of the examination.**

2. **You should enter your answers on the accompanying answer sheet.**

3. **Each question has only ONE correct answer.**

4. **You are allowed 60 minutes to complete the examination.**

5. **This exam paper consists of 30 questions. Candidates must complete ALL questions from Section One and ALL the questions from EITHER Section Two OR Section Three. *(It should be noted in this specimen paper in section 2 and 3 there is only one scenario in each, in the live paper there will be 2 scenarios for each section.)***

6. **The Pass mark for this paper is 20/30.**

7. **The Decision Tree and information about bacteria is provided at the end of this paper**

SECTION ONE
You should answer all of the questions from this section

1. The purpose of a HACCP system is to:
- **A.** Limit the number of visits by enforcement officers
- **B.** Reduce the risk of food poisoning and food-borne illness
- **C.** Provide confidence in all aspects of food quality
- **D.** Establish an efficient method for managing personnel

2. HACCP systems increase customer confidence by ensuring:
- **A.** The quality of the finished product
- **B.** Safety of food production
- **C.** Staff are suitably trained
- **D.** Food does not spoil quickly

3. HACCP:
- **A.** Prevents food spoilage
- **B.** Relies on 'end product' testing
- **C.** Is a food quality management system
- **D.** Is a legal requirement in all food businesses

4. EU regulations require food business operators to:
- **A.** Remove allergens from their product
- **B.** Operate a quality control system
- **C.** Identify and control food safety hazards
- **D.** Work to standard specifications

5. Pest control in a food safety management system is a:
- **A.** Method of verification
- **B.** Corrective action
- **C.** Prerequisite programme
- **D.** Monitoring procedure

6. Which ONE of the following is required for traceability of a product?
- **A.** Date of manufacture
- **B.** Country of Origin
- **C.** Storage requirements
- **D.** Instructions for use

7. Approved suppliers are an important prerequisite for HACCP because they:
- **A.** Are near the manufacturer
- **B.** Provide safe and wholesome food
- **C.** Are lower in price
- **D.** Are traceable

8. Which of the following lists of properties should be assessed when considering the 'intended use' of a product?
- **A.** Cost, risk, ingredients
- **B.** Risk, vulnerability, ingredients
- **C.** Specification, risk, quality
- **D.** Ingredients, cost, specification

9. A process flow diagram MUST include:
- **A.** All checks done on the production line
- **B.** Full details of the control procedures
- **C.** Reference to the records which must be used
- **D.** All processing steps in the operation

10. Before implementing a HACCP plan, supervisors should be given special training in:

A. Health and Safety
B. How to monitor CCPs
C. Level 2 food safety
D. How to operate process equipment

11. At which stage of the production process might illegal additives be identified as a food safety hazard?

A. Purchase of raw material
B. Storage of raw materials
C. Mixing of ingredients
D. Final cooking step

12. Control measures at CCPs must:

A. Eliminate all food safety hazards
B. Lessen the need for monitoring
C. Reduce hazards to acceptable levels
D. Minimise the risk of food spoilage

13. The Decision Tree is used to:

A. Decide control measures
B. Identify critical hazards
C. Establish critical limits
D. Identify CCPs

14. Which ONE of the following is true about critical limits?

A. Each control point has set absolute values
B. Good quality food is separated from poor quality food
C. The acceptable is separated from the unacceptable
D. A boundary is established by using the decision tree

15. Corrective action is carried out to:

A. Maintain food quality
B. Ensure production is not lost
C. Regain control of the process
D. Reduce the processing times

16. What would be the MOST effective way of developing a good HACCP culture across the operation?

A. Outlining consequences of failure to follow food safety rules
B. Providing training appropriate to each level of staff responsibility
C. Giving financial incentives for compliance with monitoring procedures
D. Increasing levels of active supervision by senior departmental staff

17. ONE reason for validating elements of the HACCP system is to:

A. Obtain evidence that the selection of critical limits ensures effective control of hazards
B. Audit staff monitoring of procedures in order to determine compliance with the HACCP plan
C. Confirm that corrective actions are being carried out to address non-compliances with the HACCP plan
D. Check that elements of the prerequisite programmes continue to operate effectively on a day to day basis after the HACCP plan has been implemented

18. Changes to processes can be identified by:

A. Auditing the process flow
B. Reviewing corrective actions
C. Inspecting training records
D. Analysing costs of levels of waste

19. Changes to a HACCP plan can be managed by:

A. Controlled amendments
B. Visits from enforcement officers
C. Verbal instruction to employees
D. Notices to line supervisors

20. HACCP systems should be reviewed:

A. At specified intervals
B. Before visits by enforcement officers
C. After a complaint of poor food quality
D. When there is a quality issue

END OF SECTION ONE

SECTION TWO: Catering

The questions in this section relate to catering. Only answer these questions if you work in a catering environment or have been instructed to do so by your tutor. If you answer the questions in this section, DO NOT answer any of the questions in Section Three:

Jackson's Café and Bistro

Jackson's Café and Bistro is a family business run by the owners, Sue and Peter. The kitchen is managed by John as chef manager. John is expected to take charge when the owners are absent. There are also two part-time catering assistants.

The cafe bistro offers a range of dishes either cooked in advance, cooled, refrigerated and reheated to order or cooked and held hot for lunchtime and evening services. These dishes include chicken, beef and lamb casseroles, and hot menu items suitable for vegetarians.

Burgers and steaks are also available cooked to order. Cooked meats are also bought in for salads and sandwich service.

On Sundays, roast beef, turkey and ham with a selection of vegetables and gravy are available together with a vegetarian option. These Sunday dishes are cooked and held hot for service to order from the kitchen.

John has recently attended a Level 3 HACCP course and has been asked by the owners to provide feedback on possible improvements to the limited documented management of food safety.

John also finds limited evidence of food safety hazard assessments, written controls for cooking, cooling, storage chilled and re-heating in the existing HACCP plan relevant to his menu.

21. John understands that a food safety hazard is significant in his operation if there is a:

A. Low risk of harm to his adult customers
B. Chance of food being returned to the kitchen
C. Real likelihood of guest dissatisfaction
D. Serious risk to his customers' health

22. Outgrowth of bacterial spores during cooling of roast beef for next day service has been identified by John as a critical control point.

Using the CODEX Decision Tree supplied what was the correct sequence of questions that led to this decision?

Process step	Hazard	Control measures
Cooling roast beef joints (weight 2.0 kg) for next day service	Outgrowth of bacterial spores due to extended period of cooling at ambient temperatures e.g. from 2pm to 11pm	Rapid temperature reduction. The beef joint is placed in a rack over crushed ice to cool the beef to reach a core temperature of 20°C from 50°C within 2 hours prior to storage chilled

	Q1	Q1a	Q2	Q3	Q4	CCP?
A	YES	-	YES	-	-	YES
B	NO	NO	-	-	YES	NO
C	YES	-	NO	YES	NO	NO
D	YES	-	NO	NO	-	NO

23. John was concerned that few completed records were available to demonstrate that cooked meats were being stored chilled at the correct temperature (<5^0 C).

Completed monitoring records of monitoring procedures at Jackson's café & Bistro should include:

A. Verification, method, frequency
B. Frequency, validation, method
C. Controls, frequency, responsibility
D. Responsibility, method, frequency

24. The Jackson's café and bistro HACCP system should be reviewed when:

A. New food handlers start work
B. There is an alteration to kitchen layout
C. Processing equipment breaks down
D. There is a quality issue with menu items

25. How might John prove to his EHO that his cooling practices have been validated?

A. Monitoring records are available for every cooling operation and meet industry guidelines
B. Procedures conform to the Industry Guide to Good Hygiene Practice Catering Guide 2016
C. Food has been checked to ensure it has been thoroughly cooked before being cooled down
D. The catering assistants have certificates in food safety and hygiene which is refreshed regularly

END OF SECTION TWO

<u>If you have answered the questions in this section DO NOT answer any of the questions in Section Three</u>

SECTION THREE: Manufacturing

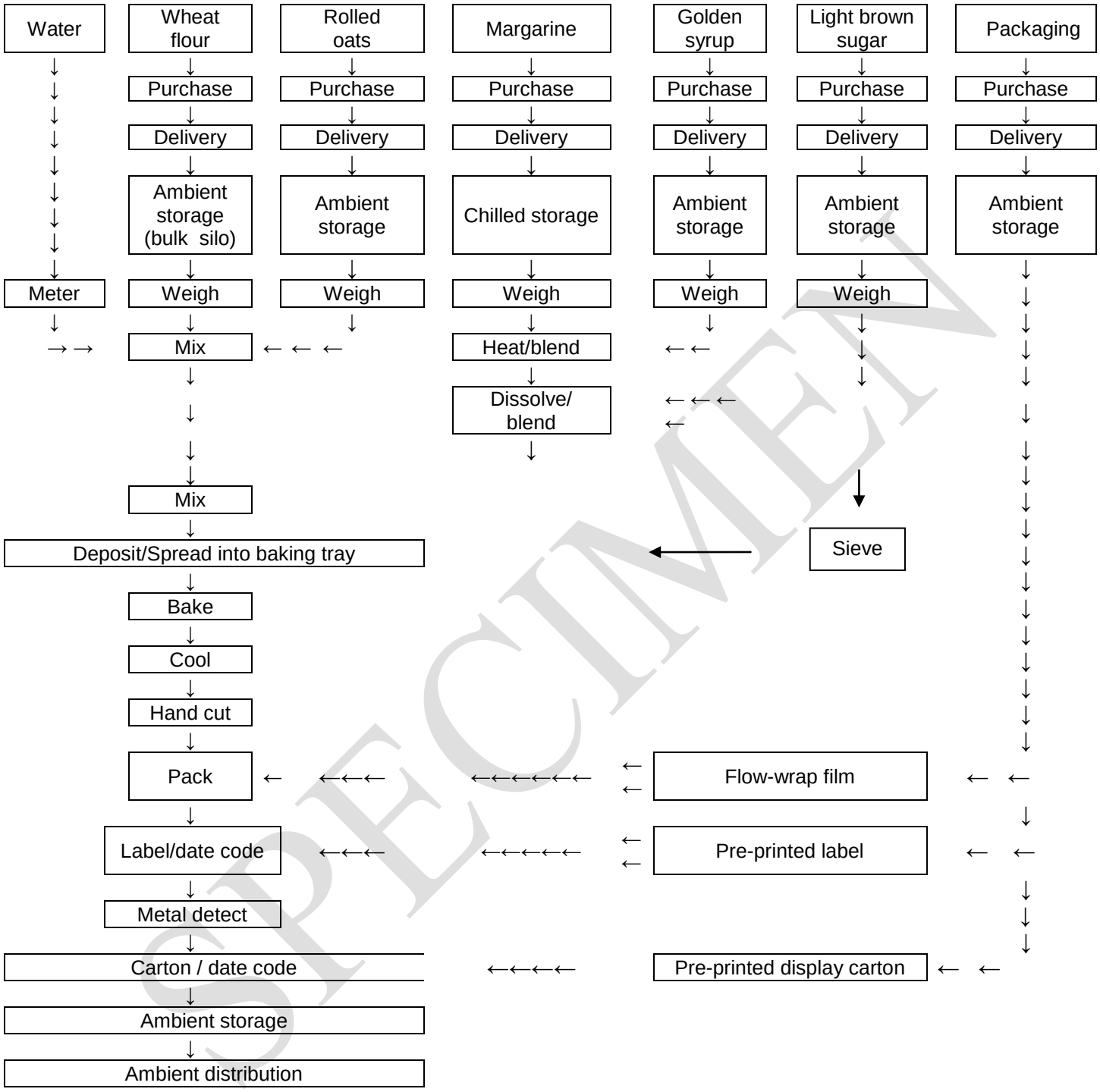
The questions in this section relate to food manufacturing. Only answer these questions if you work in a manufacturing environment or have been instructed to do so by your tutor. If you answer the questions in this section, DO NOT answer any of the questions in Section Two:

Flapjacks

Scope - Allergens, physical and chemical hazards from receipt of ingredients to dispatch of finished product.
Ingredients: Flour, margarine, golden syrup, light brown sugar, rolled oats, water
The flour and oats are mixed together with water in the mixer. Golden syrup and margarine are heated separately, mixed together then sugar is added. All the ingredients are then mixed together. Finally, the mixture is deposited into greased trays, baked until golden and then cooled on racks.
Once cooled, the flapjack is hand finished by cutting into 10cm squares before being packaged.
Wheat contains gluten, an ingredient that must be labelled as an allergen under EU Regulations.
Additional information.

Mycotoxins are harmful chemicals produced by certain fungi. Mycotoxins can be formed in cereal grain during prolonged storage. Effective management of grain temperature and moisture content can significantly reduce the risk of mycotoxin formation. European law sets maximum permitted levels of mycotoxins to protect public health.

The diagram below shows the first draft of a process flow diagram for flapjacks



26. A routine inspection identified a damaged sieve.

What IMMEDIATE corrective action should be taken?

A. Replace sieve at the next planned maintenance
B. Quarantine all product since last routine inspection
C. Reject all products
D. Replace sieve and continue production

27. The HACCP team have asked a consultant to comment on the draft process flow diagram before writing the HACCP plan.

The consultant reports that there are no sieving steps in the process flow diagram for sieving flour. This step should go between:

A. Weighing and mixing dry ingredients
B. Mixing dry ingredients and adding water
C. Delivery of the flour and discharging into silo
D. Bulk storage and weighing

28. The HACCP team have identified the presence of mycotoxins in rolled oats as a chemical hazard. Which of the following is a control measure for this hazard?

A. Monthly testing of the finished product
B. Controlled storage conditions on site
C. Auditing of the rolled oats supplier
D. Daily monitoring of humidity conditions

29. The team have identified the presence of physical contamination in the finished product as a potential hazard.

Process step	Hazard	Control measure
Sieving	Presence of foreign bodies e.g. wood and packaging fragments in the finished product	An intact well-maintained sieve

Using the CODEX Decision Tree supplied, which **ONE** of the following is the correct sequence of answers for determining if the sieve control of metal contamination at this step is a critical control point?

Select ONE correct sequence:

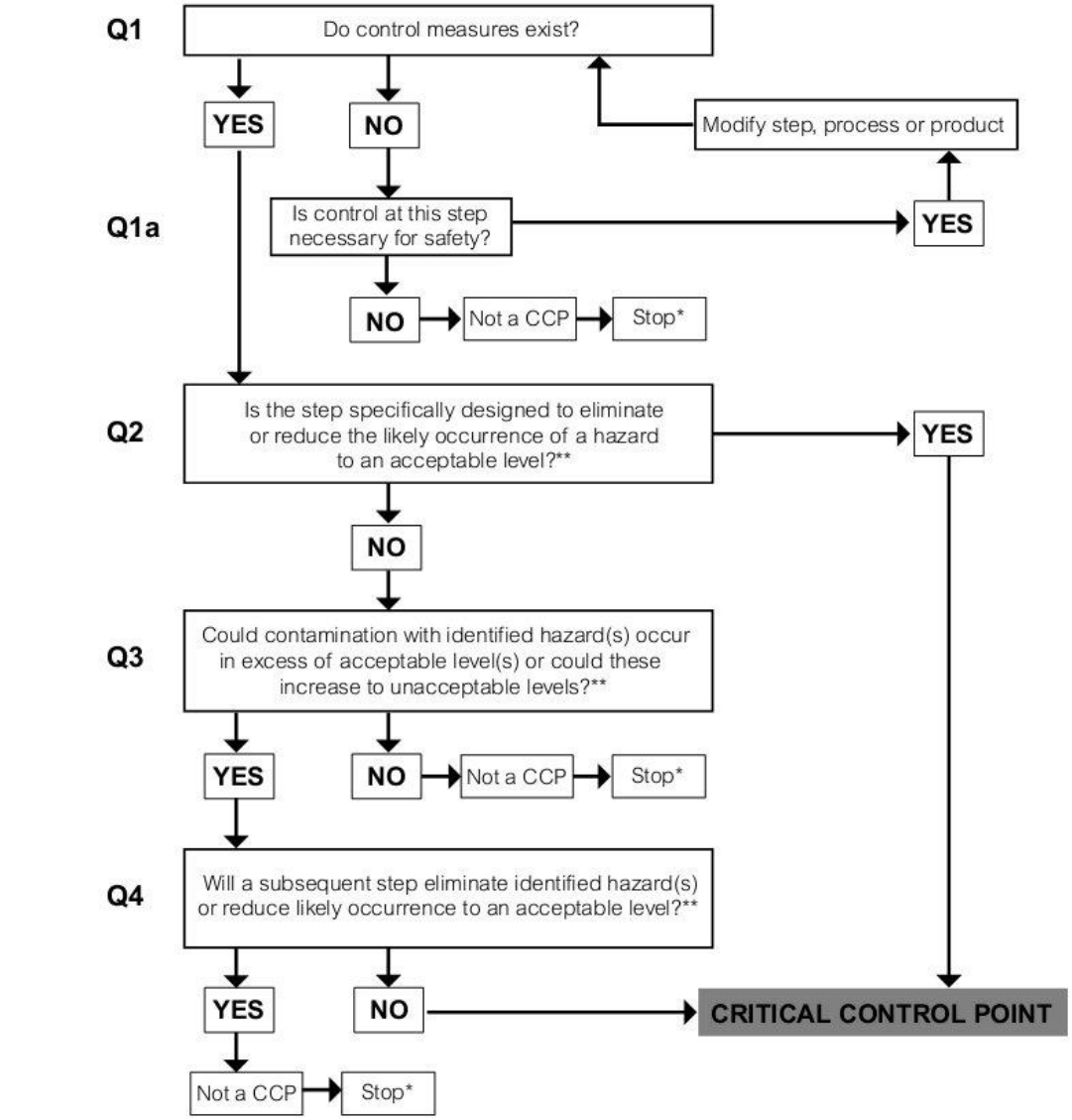
	Q1	Q1a	Q2	Q3	Q4	CCP?
A	NO	NO	-	-	-	NO
B	YES	-	YES	-	-	YES
C	YES	-	NO	NO	-	NO
D	YES	-	NO	YES	YES	NO

30. The labelling step has been identified as a CCP for the control of allergens. What would be a suitable monitoring procedure at this step?

A. Quality Assurance Manager to check the label wording every week
B. Line Operative to check the label is correct at intervals during every shift
C. Goods Inwards Supervisor to check the product specification every delivery
D. Technical Manager to carry out monthly audit of labelling procedures

END OFSECTION THREE

Example of a codex decision tree to identify CCPs



* Proceed to the next identified hazard in the described process.
** Acceptable and unacceptable levels need to be defined within the overall objectives in identifying the CCPs of HACCP plan.

Growth Requirements of Bacteria

In order to grow bacteria require a source of nutrients, an appropriate atmosphere, neutral or alkaline conditions, available moisture and an appropriate temperature.

A large number of bacteria are able to grow with or without oxygen. Some bacteria (known as obligate aerobes) will only grow if oxygen is present. Other bacteria (obligate anaerobes) will only grow in the absence of oxygen.

Most bacteria grow best in a neutral or alkaline environment. Bacteria do not grow well in foods which are too acidic ((with a pH of less than 4.5)), the more acidic the food, the less likely they are to support the growth of bacteria.

Foods that are dried or high in salt or sugar have reduced available moisture content. Bacteria will grow poorly on these foods.

Most bacteria will not grow in cold conditions, or will only grow and divide slowly. High temperatures will also inhibit the growth of bacteria, most food poisoning bacteria are killed if exposed to a temperature of 70°C for two minutes or more. The optimum temperature range for the growth of most bacteria is 5°C to 63°C. This is known as the 'temperature danger zone'.

Spore Production by Bacteria

Some bacteria are able to produce spores. These are highly resistant structures that allow the bacterial cell to survive adverse conditions such as high temperatures, lack of moisture and disinfectants. Normal cooking and processing temperatures may not be high enough to destroy any spores present in food. If cooking and processing is followed by slow cooling the spores may germinate, allowing rapid multiplication of bacteria.

Some spore formers are obligate anaerobes. The presence of oxygen will stimulate spore production in these bacteria. These spores may later germinate if the environment becomes anaerobic.

RSPH
ROYAL SOCIETY FOR PUBLIC HEALTH
VISION, VOICE AND PRACTICE
John Snow House
59 Mansell Street
London
E1 8AN
www.rsph.org.uk