



**PIABC LEVEL 5 DIPLOMA
IN PACKAGING TECHNOLOGY (QCF)**

(Qualification Number: 600/0017/X)

EXAMINATION PAPER

November 2017

A/502/5921 UNIT 01

Packaging in Today's World

Reading Time: 5 minutes

Examination Time: 3 Hours

You are required to answer and pass **ALL** the questions

Write your answers in the answer book provided

Wherever possible, use diagrams to illustrate your answer

This is a closed book examination

PIABC Level 5 Diploma in Packaging Technology (QCF)
Unit 1 – Packaging in Today's World
November 2017

YOU ARE REQUIRED TO ANSWER **ALL** THE QUESTIONS ON THIS PAPER

Learning Outcome 1
Understand the role of packaging in the modern society
(This question is worth 10% of the marks for this unit)

Question 1

Describe FIVE significant changes (societal/technological) and the impact they have had on product packaging. (5 x 2 marks)

Learning Outcome 2
Understand the structure and interactions of elements in the packaging supply chain
(This question is worth 20% of the marks for this unit)

Question 2

Labelled punnets of fresh strawberries weighing 400g are to be imported using air transport and sold through a major retailer.

- A) Describe the supply chain from the field where the strawberries are picked through to the retail store with a full description of the load construction (including the primary and secondary packs). (8 marks)
- B) Discuss the likely hazards the packed product may encounter, their effects and how the packaging and processes used could minimise the damage and reduce cost. (10 marks)
- C) How can coding systems help in the packing, distribution and sale of this product? (2 marks)

Learning Outcome 3
Understand the functions of packaging
(This question is worth 30% of the marks for this unit)

Question 3

- A) Identify the functions of packaging. (4 marks)
- B) Discuss how the primary packaging of a can of soup performs the functions of packaging. (6 marks)
- C)
 - a) Discuss how a shelf ready pack for collating packs of biscuits performs the functions of packaging. (6 marks)
 - b) Briefly describe an appropriate tertiary packaging for the shelf ready packaging case identified above. Discuss how this contributes to the functions of the complete pack. (6 marks)
- D) Describe how temperature and humidity changes can cause deterioration of various types of packaging materials. (8 marks)

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Learning Outcome 4
Know the principles of the key legislation, regulations and standards relating to the packaging supply chain

(This question is worth 15% of the marks for this unit)

Question 4

- A) Describe TWO types of intellectual property, which are protected by legislation, that need to be considered when designing new packaging. (2 x 2 marks)
- B) Identify a piece of legislation which aims to protect workers (1 mark). Describe ONE requirement of this legislation (2 marks) and the consequences of failing to comply (1 mark).
Note: Please state which country's legislation is being cited.
- C) Compare and contrast the use of legislation versus standards in achieving desirable good practice. (5 x 1 mark)
- D) What is a due diligence defence and when can it be used? (2 marks)

Learning Outcome 5
Understand the factors that affect the impact of packaging on the environment

(This question is worth 15% of the marks for this unit)

Question 5

- A) Explain what is meant by an environmentally responsible pack. (4 marks)
- B) Discuss the factors that can impact on the degree to which packaging waste can be minimised. (8 marks)
- C) What is life cycle assessment? (3 marks)

Learning Outcome 6
Understand the relationship between packaging and marketing

(This question is worth 10% of the marks for this unit)

Question 6

- A) a) Identify the 4 P's of marketing. (4 x ½ mark)
b) Explain the relationship between packaging design and the 4 P's. (4 x 1 mark)
- B) Using examples; identify the characteristics of a strong brand and discuss how this is supported by the packaging used. (4 x 1 mark)