



PIABC LEVEL 5 DIPLOMA IN PACKAGING TECHNOLOGY

(Qualification Number: 600/0017/X)

EXAMINATION PAPER

June 2019

A/502/5921 UNIT 01

Packaging in Today's World

INSTRUCTIONS TO CANDIDATES

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

Reading Time: 5 minutes

Examination Time: 3 Hours

PIABC Level 5 Diploma in Packaging Technology
Unit 1 – Packaging in Today’s World
June 2019

INSTRUCTIONS TO CANDIDATES

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

- A) Identify and discuss how packaging has adapted to suit the needs of modern lifestyles. (8 x 1 mark)
- B) As well as being environmentally responsible; briefly describe the TWO other major drivers that encourage manufacturers today to reduce the amount of packaging they use. (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

- A) Using examples, define primary, secondary and tertiary packaging. (3 x 1 mark)
- B) A carbonated beverage is packed in a labelled 300ml glass bottle with a metal closure. Six bottles are collated in a carton board outer. The carbonated beverage is mainly sold via the major retail chains.
- Identify THREE main mechanical hazards this product would face in the supply chain. For EACH describe its causes and effects and explain what can be done to mitigate the effects. (3 x 4 marks)
- C) Describe the ways in which pre-shipment transit trials and laboratory simulations can be used to assess the pack’s performance in the supply chain. (5 marks)

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

Question 3

- A) For both of the following; describe an appropriate primary pack and discuss how the primary packaging performs the functions of packaging:
- beer (8 marks)
 - fresh beef steaks (8 marks)
- B) Describe an appropriate returnable secondary pack used to deliver fresh product into supermarkets and discuss how it performs the functions of packaging. (8 marks)
- C) Describe how changes in temperature and humidity could cause packaging deterioration. (6 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) Identify and discuss THREE legislative considerations which are needed for worker protection in the packaging supply chain. (3 x 2 marks)
- B) Identify and discuss TWO legislative considerations which are needed for environmental protection in the packaging supply chain. (2 x 3 marks)
- C) Identify SIX possible consequences of failing to comply with legislation. (6 x ½ mark)

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) Recently many organisations have expressed an interest in moving away from plastic packaging. Discuss, using examples, the possible environmental impacts of this strategy if implemented. (6 x 2 marks)
- B) Describe how the environmental impact of a pack can be assessed. (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) Identify and describe THREE key functions of marketing when developing a new product. (3 marks)
- B) Identify FOUR features of packaging that play a role in supporting a brand's equity. (4 x ½ mark)
- C) Briefly discuss FIVE different activities or tools used in the market research process to identify consumer needs. Give examples to explain your answer. (5 x 1 mark)