



SUMMER EXAMINATIONS 2024

EXAMINATION: UNIT 2 Packaging Materials and Containers I

COURSE: CPD Diploma in Packaging Technology

DATE: 9th May 2024

2pm to 4 pm

EXAMINERS: David Little, Anne Morrissey

TIME ALLOWED: 2 hours

INSTRUCTIONS: Please answer four questions. All questions carry equal marks

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The use of programmable or text storing calculators, smart phones etc are expressly forbidden. Please note that where a candidate answers more than the required number of questions, the examiner will mark all questions attempted and then select the highest scoring ones.

Question 1 (25 marks)

- a) Explain what is Aluminium Foil? Describe the two different appearances on the surface of a foil and how they are produced.

(5 marks)

- b) Aluminium sheet can be hot rolled or cold rolled. Explain what happens during each method and the characteristics of the resultant products using diagrams, as appropriate to illustrate your answer.

(15 marks)

- c) Explain the reasons why aluminium foil is a commonly used material in flexible packaging.

(5 marks)

Question 2 (25 marks)

- a) With the aid of a diagram describe the production of containers using the Blow and Blow Process from gob formation to the presentation of containers for annealing

(10 marks)

- b) Discuss why surface coatings are used on glass, where and how they are applied, their functions and an example of each type.

(15 marks)

Question 3 (25 marks)

- a) For each of the following, briefly describe the material, type and style which would be suitable for these products. Give reasons for your selections:

- a. A frozen pizza carton
- b. A carton for a Swiss Roll cake
- c. A blister pack carton for a high speed pharma line
- d. A SRP (Shelf Ready Pack) for small cat food sachets
- e. A toothpaste carton

(5 marks each = 25 marks)

Question 4 (25 marks)

From a sustainability perspective, discuss the advantages and disadvantages of moving from a Kraft/Kraft corrugated board to a Test/Test corrugated board. You should use examples to illustrate your answer.

(25 marks)

Question 5 (25 marks)

- a) With the specification below, discuss the production steps in a carton company that are taken to bring a one-up keyline and approved sample carton, to a finished carton that is boxed and palletised.

The specification is a skillet-end, straight-line glued, biscuit carton, printed CMYK plus white and UV lacquer, on metallised board, embossed image, with a window.

(20 marks)

- b) There are a number of style catalogues available. Pick one and discuss the benefits and how they are used.

(5 marks)