

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION SEMESTER II SESSION 2013/2014

COURSE NAME

: PRINCIPLES OF PACKAGING

COURSE CODE : BNK 20103

PROGRAM

: 2 BNK

EXAMINATION DATE : JUNE 2014

DURATION

: 2 HOURS AND 30 MINUTES

INSTRUCTION

: ANSWER FOUR(4) QUESTIONS

ONLY.

THIS QUESTION PAPER CONSISTS OF SIX (6) PAGES



Q1 (a) List **THREE(3)** main functions of packaging.

(3 marks)

(b) List **FIVE(5)** packaging materials.

(5 marks)

(c) Figure **Q1(c)** shows the pie chart of packaging material used in the global market. Discuss the pie chart relationship towards the packaging material characteristics.

(12 marks)

- Q2 (a) Explain briefly the performance of a package depending on elements below:
 - (i) The packaging materials
 - (ii) The package physical design
 - (iii) The types of product
 - (iv) The packaging distribution system
 - (v) The environment effect
 - (vi) The time constraints

(12 marks)

- (b) Figure **Q2(b)** shows the lowest possible cost graph, the lose by damage(%) towards cost of packaging. Explain how the total packaging system cost can be reduce through:
 - (i) development cost
 - (ii) package cost
 - (iii) packaging cost
 - (iv) distribution cost

(13 marks)

Q3	(a)	Describe determination of Product Fragility "G Factor" (5 marks)
	(b)	List FIVE (5) basic categories of distribution depending on the packaging function and product requirements.
	(c)	(5 marks) List and explain briefly THREE (3) types of physical distributions. (5 marks)
	(d)	Explain the purpose of using cushion on packaging system and describe TWO (2) characteristics of cushion material. (10 marks)
Q4	(a)	List FIVE (5) the factors affecting of product quality and "shelf life". (5 marks)
	(b)	List SEVEN (7) factors of Modified Atmosphere Packaging (MAP). (7 marks)
	(c)	Explain the concept of "shelf life" and its application on food industry. (13 marks)
Q5	(a)	Identify the difference between food packaging and pharmaceutical packaging. (5 marks)
	(b)	Discuss extensively based on the physical and chemical properties on how to protect the product sensitivity during distribution. (20 marks)

Q6 (a) List EIGHT (8) the concept of package development process.

(8 marks)

(b) Figure **Q6(b)** shows a marketing strategy model. Discuss how the marketing strategy and application of packaging can be increase for customer satisfaction.

(17 marks)

- END OF QUESTION -

FINAL EXAMINATION

SEMESTER/ SESSION: SEM 2 20132014

COURSE : PRINCIPLES OF PACKAGING

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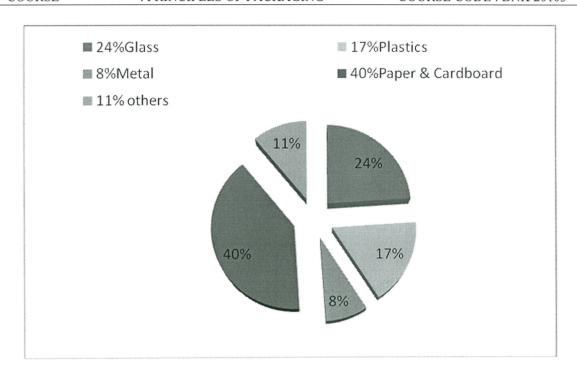
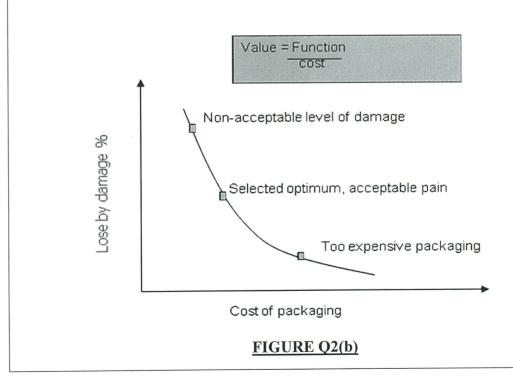


FIGURE Q1(c)



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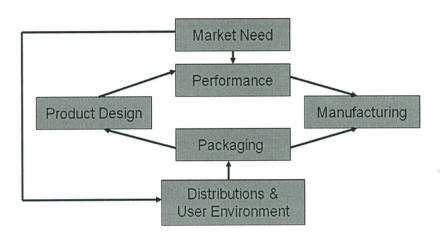


FIGURE Q6(b)