

This paper consists of **THREE (3)** pages including the front page.
Essay (6 questions – **answer 4** questions)

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This section consists of **SIX (6)** structured questions. Answer **FOUR (4)** questions only.

QUESTION 1

- a. State the definition of manufacturers' need in packaging industry. (4 marks)
menemui kehendak pengguna log
- b. State **THREE (3)** regulation influences in packaging industry (6 marks)
menyediakan perkhidmatan pengguna bagi keperluan harian
akta FDA
- c. Describe **FIVE(5)** main criteria of manufacturer requirement. (15 marks)
keperluan pembuat

proses pemasaran pengeluaran undang-undang perkhidmatan pembelian

QUESTION 2

- a. State the definition of shelf life system for product. (5 marks)
saiz tempoh masa bagi sebelum dianggap x selesai
- b. Explain the terminology of "Sell By Date" and "Use By Date" in food industry. (8 marks)

- c. State **FOUR(4)** advantages of applied shelf life forecast system to define the efficiency of food packages. (12 marks)

QUESTION 3

- a) Compare **THREE (3)** criteria between pharmaceutical and food product (6 marks)
- b) Explain **FOUR (4)** characteristics of electronic and electrical product. (9 marks)

- c) Discuss **FIVE (5)** technical requirements for food product. (10 marks)
keperluan teknikal bg produk makanan
x terdedah pada udara
mengikut akta FDA (Food & drug administration)
logo halal
mempunyai tarikh luput
bersih
kat katok

QUESTION 4

a) State the functions of packaging specifications
 - utk memudahkan pengambilan pembungkusan yg baru (5 marks)

← b) State **FIVE (5)** main items required in specification form. (10 marks)
 produk
 kaedah rekat pembungkusan
 rekabentuk pembungkusan
 bahan mentah

c) State **FOUR (4)** specification development justifications for a product in packaging industry - (10 marks)
 Spesifikasi
 Perancangan

knp perlu buat kenapa per diperlukan
 - utk baik pulih produk lama
 - sebagai menu alternatif
 Jumlah { takat

QUESTION 5

a) State **TWO (2)** types of specifications in packaging industry. (5 marks)
 Purchasing order
 Quotation from supplier

b) State **FIVE (5)** items that require the preparation for the specification of packaging equipments (10 marks)

c) State **FIVE (5)** items that require the planning the specification in packaging (10 marks)
 perancangan
 bahan mentah

QUESTION 6

a) Write a complete specification (construction) for a glass jar to put peanut butter. (10 marks)

b) Write a complete specification (construction) with a sketch for a plastic bottle to put beverages. (15 marks)