SECTION B : 70 MARKS

BAHAGIAN B: 70 MARKAH

INSTRUCTION:

This section consists of **THREE (3)** structured questions. Answer **ALL** questions.

ARAHAN:

*Bahagian ini mengandungi **TIGA (3)** soalan struktur. Jawab **SEMUA** soalan.*

QUESTION 1

SOALAN 1

CLO1
C1

(a)   Define information system.

   Takrifkan sistem maklumat.

[2 marks]
[*2 markah*]

CLO1
C2

(b)   List **FOUR (4)** information system components.

   *Senaraikan **FOUR (4)** komponen sistem maklumat.*

[4 marks]
[*4 markah*]

CLO1
C2

(c)   Explain **TWO (2)** characteristics of Agile / Adaptive model.

   *Jelaskan **DUA (2)** ciri model Agile / Adaptive.*

[4 marks]
[*4 markah*]

CLO1
C2

(d)   Explain **ONE (1)** main phase in Software Development Life Cycle (SDLC).

   *Terangkan **SATU (1)** fasa utama di dalam Kitaran Hayat Pembangunan*

   Perisian (SDLC).

[2 marks]
[*2 markah*]

CLO1
C3

(e) Based on the scenario below, sketch a life cycle model .

Lakarkan model kitaran hayat berdasarkan senario di bawah.

Hannah Delisha develops a system through iteration planning, requirement analysis, designing, building and testing. Each iteration takes 2 months to complete.

Hannah Delisha membangunkan sistem melalui perancangan lelaran, analisis keperluan, mereka bentuk, membina dan menguji. Setiap lelaran mengambil masa 2 bulan untuk menyelesaikannya.

[3 marks]
[*3 markah*]

CLO1
C2

(f) Explain one step in preliminary investigation, namely "Understand the problem or opportunity".

Terangkan tentang salah satu langkah di dalam penyiasatan awal iaitu "Fahami masalah atau peluang."

[2 marks]
[*2 markah*]

CLO1
C3

(g) Construct **THREE (3)** questions that analyst must generate when considering operational feasibility during an interview with a client.

*Bina **TIGA (3)** soalan yang boleh diajukan oleh seorang penganalisis bagi situasi berkaitan kebolehsanaan operasi semasa temubual dengan pelanggan.*

[3 marks]
[*3 markah*]

QUESTION 2

SOALAN 2

CLO1
C2

(a)   Explain **TWO (2)** system requirements with an example each.

*Senaraikan **DUA (2)** keperluan system beserta contoh masing-masing.*

[5 marks]

[*5 markah*]

Based on the information given in Figure B2(b), answer the questions that follow.

Berdasarkan Rajah B2(b), jawab soalan berikut.

General Information: Please answer the following questions

1. Age: ☐ Years

2. Gender: Male ☐   Female ☐

3. Ethnicity: Please tick one of the following

White ☐   Chinese ☐

Black ☐   Mixed ☐

Asian ☐   Other(please specify) ☐

4. How much exercise do you feel is enough in one week? ☐ Hours

5. How would you describe your General Physical Activity? (Please tick one)

Low Physical Activity ☐

Moderately Physical Activity ☐

High Physical Activity ☐

6. Are there any factors that limit your ability to be physically active, such as, a disability or medical condition? If yes, please describe below:

....
....
....
....

7. Height ☐   Weight ☐

Figure B2(b) / *Rajah B2(b)*

CLO1
C2

(b) Identify the type of fact-finding method that can be found based on Figure B2(b).

Kenal pasti jenis penemuan fakta berdasarkan Rajah B2(b).

[1 mark]

[*1 markah*]

CLO1
C2

(c) Explain **TWO (2)** open questions in Figure B2(b).

*Terangkan **DUA (2)** soalan terbuka dalam Rajah B2(b).*

[4 marks]

[*4 markah*]

CLO1
C2

(d) Illustrate the correct diagram for:

Lakarkan rajah yang betul untuk :

i)   The **entity** used in context diagram.

      ***Entiti** digunakan dalam gambar rajah konteks.*

[2 marks]

[*2 markah*]

ii)   The **process** in data flow diagram.

      ***Proses** dalam rajah aliran data.*

[2 marks]

[*2 markah*]

CLO1
C2

 (e) Identify **THREE (3)** main function that can be included in the developing of Function Decomposition Diagram (FDD) for Food Ordering System.

*Kenal pasti **TIGA (3)** fungsi utama yang boelh dimasukkan dalam Membangunkan rajah Penguraian Fungsi (FDD).*

[6 marks]

[*6 markah*]

CLO1
C3

(f)   There are two combinations of data flow and process that you must avoid. Draw an example of data flows and process combinations for the following situations.
Terdapat dua kombinasi aliran data dan proses yang anda mesti elakkan. Lukiskan contoh kombinasi aliran data dan proses bagi situasi berikut.

   i.   Grey Hole
   ii. Black Hole

[6 marks]

[6 *markah*]

CLO1
C3

(g)   Sketch a Data Flow Diagram (DFD) level 0 for a Food Ordering System with at least **ONE (1)** process and **THREE (3)** external entities including Customer, Kitchen, Restaurant Manager and **FOUR (4)** data flows with the correct symbols and labels.
*Lakarkan Diagram Aliran Data (DFD) level 0 untuk Sistem Pemesanan Makanan yang perlu mempunyai sekurang-kurangnya **SATU (1)** proses dan **TIGA (3)** entiti luaran termasuk Pelanggan, Dapur, Pengurus Restoran dan **EMPAT (4)** aliran data dengan simbol dan label yang betul.*

[4 marks]

[4 *markah*]

QUESTION 3

SOALAN 3

CLO1
C1

(a)   Define validation rules.

Takrifkan peraturan pengesahan .

[2 marks]

[*2 markah*]

CLO1
C2

(b)   Based on the Customer Details interface shown in Figure B3(b), answer all of
the questions below.

Berdasarkan antaramuka Butiran Pelanggan dalam Rajah B3(b), jawab

semua soalan di bawah.

Figure B3(b) /*Rajah B3(b)*

i)   Classify **THREE (3)** types of user input data.

*Kelaskan **TIGA (3)** jenis data input pengguna.*

[3 marks]

[*3 markah*]

     ii)   Classify **TWO (2)** existence check inputs from the Customer Details interface.

            *Kenal pasti **DUA (2)** input semakan kewujudan dari antaramuka Customer Details.*

[2 marks]

[*2 markah*]

CLO1
C3

(c)   Construct an input interface to visualize existence check for each of the questions below:

Bina antara muka input bagi mengambarkan semakan kewujudan bagi setiap soalan di bawah:

    i. IC Number *

       *Nombor IC**

    ii. Phone Number *

       *Nonmor Telefon**

[4 marks]

[*4 markah*]

CLO1
C3

(d)   Based on the information in Figure B3(d), sketch a suitable input design and make sure the user can select more than **ONE (1)** choice.

*Berdasarkan Rajah B3(d), lakarkan reka bentuk input yang sesuai dan pastikan pengguna boleh memilih lebih dari **SATU (1)** pilihan.*

```
What are your favourite food?
Pizza
Fried Chicken
Hamburger
Chicken Chop
```

Figure B3(d) /*Rajah B3(d)*

[4 marks]

[*4 markah*]

CLO1
C2

(e) Explain **ONE (1)** element of system security.

Terangkan **SATU** *(1) elemen keselamatan sistem*

[2 marks]

[*2 markah*]

CLO1
C3

(f) Keramat Jitra Restoran will be using a new Food Ordering System. Rahmat was given a task to perform training for waiters and cashiers using the new system. Write **TWO (2)** steps that Rahmat can take to implement the best training for both employees.

Restoran Keramat Jitra akan menggunakan Sistem Pesanan Makanan baharu. Rahmat ditugaskan untuk melaksanakan latihan kepada pelayan dan juruwang menggunakan sistem baharu tersebut. Tulis **DUA (2)** *langkah yang boleh dilakukan oleh Rahmat untuk melaksanakan latihan yang terbaik kepada kedua-dua pekerja.*

[3 marks]

[*3 markah*]

END OF QUESTION

SOALAN TAMAT