

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 berstruktur. Jawab semua soalan.*

QUESTION 1**SOALAN 1**

CLO1
C1

- (a) List **TWO (2)** categories of the operating system.

*Senaraikan **DUA (2)** kategori sistem pengoperasian.*

[2 marks]

[2 markah]

CLO1
C2

- (b) Identify the type of user interface in operating system for X, Y and Z based on the user's requirement in Table 2.0 below.

Kenal pasti antaramuka pengguna dalam sistem operasi bagi X, Y dan Z berdasarkan keperluan pengguna dalam Jadual 2.0 di bawah.

Table 2.0 /Jadual 2.0

User	Requirement	Type of Interface
New Students	Interact with programs without the need of typing commands	X
Programmers	Enter commands to the program in the form of text.	Y
Blind people	Provide hands-free and eyes-free interfaces in mobile for many situations.	Z

[3 marks]

[3 markah]

CLO1
C1

- (c) Identify type of memory for E, F and G in Figure B1(c).

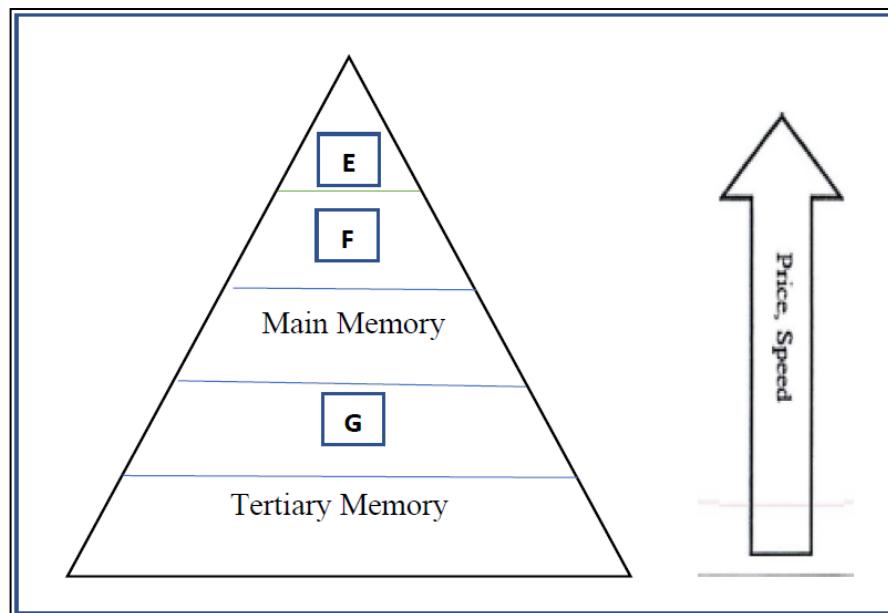
Kenal pasti jenis memory untuk, F dan G pada Rajah B1(c).

Figure B1(c)/ Rajah B1(c)

[3 marks]

[3 markah]

CLO1
C1

- (d) List all the memory management strategies.

Senaraikan semua strategi pengurusan memori.

[3 marks]

[3 markah]

CLO1
C2

- (e) Explain any THREE (3) of the different states in which a process can exist at any given time.

Terangkan mana-mana TIGA (3) daripada keadaan yang berbeza di mana suatu proses boleh wujud pada masa tertentu.

[6 marks]

[6 markah]

- CLO1 | (f) Based on Table 3.0, determine Waiting Time for process A, B, C & D using Priority scheduling algorithm when the Arrival Time for all process is at 0 ms.

Berdasarkan Jadual 3.0, tentukan masa menunggu untuk proses A, B dan C menggunakan Algoritma Penjadualan Keutamaan apabila Masa Ketibaan untuk semua proses adalah pada 0 ms.

Table 3.0/ Jadual 3.0

Process	Burst time (ms)	Priority
A	7	3
B	11	1
C	2	2
D	4	2

[4 marks]

[4 markah]

- CLO1 | (g) Explain **ONE (1)** difference each between preemptive scheduling and non-preemptive scheduling with examples.

*Terangkan **SATU (1)** perbezaan setiap satu antara penjadualan preemptive dan bukan preemptive berserta contoh.*

[4 marks]

[4 markah]

QUESTION 2***SOALAN 2***

- CLO1 (a) List **THREE (3)** directory structures in file management.

C1

*Senaraikan **TIGA (3)** struktur direktori dalam pengurusan fail.*

[3 marks]

[3 markah]

- CLO1 (b) Outline **ONE (1)** advantage and disadvantage of each bit-map and linked list regarding free space management techniques.

C2

*Gariskan **SATU (1)** kelebihan dan kekurangan setiap peta bit dan senarai terpaut mengenai teknik pengurusan ruang bebas.*

[4 marks]

[4 markah]

- CLO1 (c) Illustrate the indexed file allocation according to Table 4.0 given below.

C2

Jelaskan peruntukan fail diindeks untuk Jadual 4.0 yang diberikan di bawah.

Table 4.0/ Jadual 4.0

File	Indexed Block
Operating System	6
Indexed Point Nod:	29, 9, 1, 32, 21, 26

[4 marks]

[4 markah]

CLO1 C2	(d) Explain FOUR (4) operations of a file that can be controlled. <i>Terangkan EMPAT (4) operasi fail yang boleh dikawal.</i>	[4 marks] [4 markah]
CLO1 C1	(e) State TWO (2) Windows 10 operating system edition. <i>Nyatakan DUA (2) edisi sistem pengendalian Windows 10.</i>	[2 marks] [2 markah]
CLO1 C2	(f) Give example of each edition that you have stated in question Q2(e). <i>Berikan contoh setiap edisi yang telah anda nyatakan dalam soalan Q2(e).</i>	[2 marks] [2 markah]
CLO1 C2	(g) Windows Security is your home to manage tools that protect your device and your data. Explain FIVE (5) Windows security in Microsoft Windows 10. <i>Windows Security ialah tempat anda untuk mengurus alatan yang melindungi peranti anda dan data anda. Terangkan LIMA (5) keselamatan Windows dalam Microsoft Windows 10.</i>	[5 marks] [5 markah]
CLO1 C2	(h) Distinguish THREE (3) ways that Windows 10 32-bits differs from Windows 10 64-bits respectively. <i>Bezakan TIGA (3) cara Windows 10 32-bit berbeza daripada Windows 10 64-bit masing-masing.</i>	[6 marks] [6 markah]

QUESTION 3**SOALAN 3**

- CLO1
C1 (a) Name **THREE (3)** primary Mobile Operating System that have been manufactured

*Namakan **TIGA (3)** Sistem Operasi Mudah Alih utama yang telah dihasilkan.*

[3 marks]

[3 markah]

- CLO1
C1 (b) Identify **THREE (3)** items which available on Home Screen of Android devices.

*Kenal pasti **TIGA (3)** item yang tersedia pada Skrin Utama peranti Android.*

[3 marks]

[3 markah]

- CLO1
C2 (c) Explain **TWO (2)** main methods for installing content on mobile devices.

*Terangkan **DUA (2)** kaedah utama untuk memasang kandungan pada peranti mudah alih.*

[3 marks]

[3 markah]

- CLO1
C2 (d) Show at least **SIX (6)** steps to place apps into a folder in iOS devices.

*Tunjukkan sekurang-kurangnya **ENAM (6)** langkah untuk meletakkan aplikasi ke dalam folder dalam peranti iOS.*

[6 marks]

[6 markah]