

SECTION B : 55 MARKS**BAHAGIAN B: 55 MARKAH****INSTRUCTION:**

This section consists of **TWO (2)** structured questions. Answer **ALL** questions.

ARAHAN:

Bahagian ini mengandungi DUA (2) soalan berstruktur. Jawab semua soalan

QUESTION 1**SOALAN 1**

- | | |
|------------|--|
| CLO1
C1 | <p>(a) (i) Give the definition of operating system.
<i>Berikan definisi sistem pengoperasian.</i> [2 marks]
[2 markah]</p> <p>(ii) State TWO (2) basic functions of operating system.
<i>Nyatakan DUA (2) fungsi asas sistem pengoperasian.</i> [2 marks]
[2 markah]</p> |
| CLO1
C2 | <p>(b) (i) There are several concepts related to operating system. Describe ONE (1) of the concept.
<i>Terdapat beberapa konsep berkaitan sistem pengoperasian. Terangkan SATU (1) konsep tersebut.</i> [2 marks]
[2 markah]</p> <p>(ii) Briefly explain the Multiprocessing system as one of the platform used by various architectures of operating system.
<i>Jelaskan mengenai sistem pemprosesan berbilang sebagai salah satu landasan yang digunakan oleh pelbagai seni bina sistem pengoperasian.</i> [2 marks]
[2 markah]</p> |

(iii) Differentiate the characteristics of System Call and Application Programming Interface (API).
Bezakan ciri-ciri antara 'System Call' dan 'Application Programming Interface' (API).

[2 marks]

[2 markah]

CLO1
C1

(c) (i) State **THREE (3)** tasks of a memory manager.
*Nyatakan **TIGA (3)** tugas oleh pengurus ingatan.*

[3 marks]

[3 markah]

(ii) List **THREE (3)** types of memory management strategies.
*Senaraikan **TIGA (3)** jenis strategi pengurusan ingatan.*

[3 marks]

[3 markah]

CLO1
C1

(d) Memory is one of the major resources of a computer system. Explain about memory and give an example of a memory.

Ingatan merupakan salah satu sumber utama dalam sesebuah sistem komputer.

Jelaskan mengenai Ingatan dan berikan satu contoh Ingatan.

[3 marks]

[3 markah]

CLO1
C2

- (e) Based on Table B1(e), answer the following questions:

Table B1(e) / *Jadual B1(e)*

Process / Proses	Arrival Time <i>Masa tiba</i>	Burst Time <i>Masa letusan</i>
A	0	7
B	2	3
C	4	1

- (i) Determine the waiting time for process A, B and C by using Shortest Job First algorithm.

Tentukan masa menunggu bagi setiap proses A, B, C dengan menggunakan algoritma Shortest Job First.

[3 marks]

[3 markah]

- (ii) Calculate the average waiting time by drawing an appropriate Gantt chart.

Kirakan purata masa menunggu dengan melukis carta gantt yang bersesuaian.

[3 marks]

[3 markah]

CLO1
C2

- (f) Identify the differences between preemptive and non-preemptive scheduling according to Table B2.

Kenal pasti perbezaan di antara penjadualan pra-gangguan dan bukan pra-gangguan berdasarkan Jadual B2.

Table B2 / *Jadual B2*

Differences / <i>Perbezaan</i>	Preemptive scheduling	Non- Preemptive scheduling
Definition / <i>Definisi</i>		
Example of scheduling algorithm / <i>Contoh algoritma penjadualan</i>		

[4 marks]

[4 markah]

QUESTION 2
SOALAN 2

- CLO1
C2 (a) Describe the physical backup and logical backup and also give ONE (1) example for each of them.

Terangkan mengenai sandaran fizikal dan sandaran logik serta berikan SATU (1) contoh bagi setiap satunya.

[4 marks]

[4 markah]

- CLO1
C2 (b) Draw a Single Level directory and a Two-Level directory.

Lukiskan direktori satu peringkat dan direktori dua-peringkat.

[4 marks]

[4 markah]

- CLO1
C2 (c) Draw a picture of a Contiguous File Allocation on a disk space based on the data in the Table B2(c).

Lukiskan sebuah gambar Penempatan Fail Berdampingan dalam ruang cakera berdasarkan data di dalam Jadual B2(c).

Table B2(c)/ Jadual B2(c)

File	Start	Length
KFC	0	4
McD	19	6
KennyR	26	2
A&W	8	5
MarryB	5	3

[5 marks]

[5 markah]

- CLO3
C3 (d) Apply FOUR (4) steps on how to place android widgets on the home screen.

Aplikasikan EMPAT (4) langkah untuk meletakkan widgets android pada laman utama.

[4 marks]

[4 markah]

CLO3
C3

- (e) Apply FOUR (4) steps on how to arrange apps on iPhone home screen.

Aplikasikan EMPAT (4) langkah untuk susun atur aplikasi pada laman utama iPhone.

[4 marks]

[4 markah]

CLO3
C3

- (f) Remy is a new android operating user. Explain the steps for him to create a folder and rename the folder that has been created.

Remy adalah pengguna baru sistem pengoperasian android. Jelaskan langkah-langkah baginya untuk mencipta folder dan memberikan nama kepada folder tersebut.

[5 marks]

[5 markah]

SOALAN TAMAT