

**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) Identify the types of data for the **Table B1(a)** .

*Tentukan jenis data bagi data untuk Jadual B1(a) .*

	Data <i>Data</i>	Types of Data <i>Jenis Data</i>
i.	-2	
ii.	"DFC 10042"	
iii.	87.52	

**Table B1(a) / Jadual B1(a): Types of Data**

[3 marks]  
[3 markah]

CLO1  
C1

(b) State **TWO (2)** convention rules for identifier.

*Nyatakan DUA (2) peraturan bagi menamakan pengecam.*

[4 marks]  
[4 markah]

CLO1  
C1

(c) (i) Describe the meaning keywords.

*Terangkan maksud katakunci.*

[2 marks]  
[2 markah]

(ii) List **FOUR (4)** examples of keywords.

*Senaraikan EMPAT (4) contoh katakunci.*

[4 marks]

[4 markah]

CLO1  
C1

(d) List **TWO (2)** examples for each of the operators below.

*Senaraikan DUA (2) contoh bagi setiap operator di bawah.*

i. Relational operators / *Operator hubungan*

ii. Logical operators / *Operator logikal*

[4 marks]

[4 markah]

CLO1  
C2

(e) Determine whether the expression below is **TRUE** or **FALSE** if given  $X = 0$  and  $Y = -6$ . Show your step clearly.

*Tentukan sama ada ungkapan di bawah adalah TRUE atau FALSE jika diberi  $X = 0$  dan  $Y = -6$ . Tunjukkan jalan kerja dengan jelas.*

i.  $(X == Y) \ \&\& \ (X >= 0)$

ii.  $!(X < Y) \ || \ FALSE$

[4 marks]

[4 markah]

CLO1  
C2

- (f) Aiman needs to develop a program to calculate the total amount paid by a customer who stay at Homestay Sentosa. The payment based on the room rate and numbers of day. During school holiday, Homestay Sentosa has a promotion price to their customers based on the **Table B1(f)**.

*Aiman perlu membangunkan program untuk mengira jumlah bayaran yang perlu dibayar oleh pelanggan yang bermalam di Homestay Sentosa. Pembayaran adalah berdasarkan kadar bilik dan bilangan hari menginap. Semasa cuti sekolah, Homestay Sentosa mengadakan harga promosi kepada pelanggan berdasarkan **Jadual B1(f)**.*

**Table B1(f) / Jadual B1(f): Types of Data**

Room Categories <i>Kategori Bilik</i>	Room Rate <i>Kadar Bilik</i>	Promotion Package <i>Pakej Promosi</i>
A	RM300	10%
B	RM200	5%

Based on the problem given, identify suitable variables and correct data type to calculate the payment.

*Berdasarkan kepada masalah yang diberikan, kenal pasti pembolehubah dan jenis data yang betul untuk mengira pembayaran.*

[4 marks]

[4 markah]

**QUESTION 2**  
**SOALAN 2**

Based on the problem given,

*Berdasarkan masalah yang diberi,*

If the temperature is 80 degrees or more, the output message is 'go swimming'. If the temperature is 50 until 79 degrees, the output message is 'go running'. Otherwise, the output message is 'stay inside'.

*Jika suhu adalah 80 darjah atau lebih, mesej yang akan dipaparkan 'go swimming'. Jika suhu berada di antara 50 hingga 79 darjah, mesej yang akan dipaparkan 'go running'. Jika tidak, mesej yang akan dipaparkan 'stay inside'.*

- |            |  |                         |
|------------|--|-------------------------|
| CLO1<br>C2 | a) Write the Pseudo Code / <i>Tulis Kod Pseudo</i>   | [3 marks]<br>[3 markah] |
| CLO1<br>C2 | b) Draw the Flowchart / <i>Lukis Carta Alir</i>  | [4 marks]<br>[4 markah] |
| CLO1<br>C2 | c) Explain the following control structures in the problem solving.<br><br><i>Terangkan struktur kawalan di bawah bagi penyelesaian masalah.</i> |                         |
|            | i. Sequence / <i>Urutan</i>  | [2 marks]<br>[2 markah] |
|            | ii. Selection/ <i>Pemilihan</i>  | [2 marks]<br>[2 markah] |
|            | iii. Repetition / <i>Ulangan</i>   | [2 marks]<br>[2 markah] |

CLO1  
C2

d) Based on the problem given,

*Berdasarkan masalah yang diberi,*

A class of ten students took a quiz. Determine the average mark for this quiz.

*Sepuluh pelajar mengambil kuiz. Tentukan markah purata untuk kuiz ini.*

i. Write the Pseudo Code / *Tulis Kod Pseudo*[5 marks]  
[5markah]ii. Draw the Flowchart / *Lukis Carta Alir*[7 marks]  
[7 markah]

**QUESTION 3**  
**SOALAN 3**CLO1  
C1

- a) List
- THREE (3)**
- elements of programming language.

*Senaraikan **TIGA(3)** elemen dalam bahasa pengaturcaraan.*

[3 marks]

[3 markah]

CLO1  
C1

- b) List
- FIVE(5)**
- standards and best practices in writing program codes.

*Senaraikan **LIMA(5)** piawaian dan amalan terbaik dalam menulis kod program.*

[5 marks]

[5 markah]

CLO1  
C2

- c) Identify input, process and output from programming code based on
- Figure B3 (c)**
- .

*Kenal pasti input, proses dan output dari kod pengaturcaraan dalam **Rajah B3 (c)**.*

```
#include <iostream>
using namespace std;
int main()
{
    int number;
    cout << "Enter an integer: ";
    cin >> number;

    x = number + 3*2

    cout << "Total the number is:"<< x ;
    return 0;
}
```

**Figure B3 (c) / Rajah B3 (c)**

[3 marks]

[3 markah]

CLO1  
C2

d) Write the declaration for the variables below in C++ statement.

*Tulis pengisytiharaan pembolehubah berikut dalam pernyataan C++ dibawah.*

- i. TestScore
- ii. length
- iii. staff\_name

[3 marks]  
[3 markah]CLO1  
C2

e) Write a C++ program to find the net price of an item with 10% discount.

*Tulis program C ++ untuk mencari harga bersih bagi item dengan diskaun 10%.*

$\text{Net price} = \text{Original Price} - (\text{Original Price} * 10\%)$
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[6 marks]  
[6 markah]**SOALAN TAMAT**