

**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)** types of error in C++ programming.  
*Senaraikan **DUA (2)** jenis ralat di dalam aturcara C++.*
- [2 marks]  
[2 markah]
- CLO1  
C2 b) Identify **VALID** and **INVALID** identifier  
*Kenal pasti pengecam yang **SAH** dan **TIDAK SAH**.*
- i. 4Number  
ii. ID  
iii. long
- [3 marks]  
[3 markah]
- CLO1  
C1 c) List **THREE (3)** types of operators in C++ programming.  
*Senaraikan **TIGA (3)** jenis operator dalam pengaturcaraan C++.*
- [3 marks]  
[3 markah]
- CLO1  
C1 d) State any **FOUR (4)** data types in C++ programming.  
*Nyatakan mana-mana **EMPAT (4)** jenis data dalam pengaturcaraan C++.*
- [4 marks]  
[4 markah]

- CLO1  
C2
- e) Identify **TWO(2)** differences between **global** variable and **local** variable.  
*Kenal pasti **DUA(2)** perbezaan di antara pemboleh ubah **global** dengan pemboleh ubah **tempatan**.*
- [4 marks]  
[4 markah]
- CLO1  
C2
- f) Declare a variable for each data type given below with a suitable name.  
*Isytiharkan pemboleh ubah bagi setiap jenis data yang diberikan di bawah dengan nama yang sesuai.*
- i) integer  
ii) character  
iii) boolean
- [3 marks]  
[3 markah]
- CLO1  
C3
- g) Write a C++ statement to declare a variable with suitable data type for each given statements below.  
*Tulis satu pernyataan C++ untuk mengisytiharkan pemboleh ubah dengan jenis data yang sesuai bagi setiap pernyataan yang diberikan di bawah.*
- i) A variable “**Age**” which has an initial value of **23**.  
*Satu pemboleh ubah “**Age**” yang mempunyai nilai permulaan **23**.*
- ii) A variable “**Price**” which has an initial value of **5.25**.  
*Satu pemboleh ubah “**Price**” yang mempunyai nilai permulaan **5.25**.*
- iii) A variable “**Grade**” which has an initial value as ‘**F**’.  
*Satu pemboleh ubah “**Grade**” yang mempunyai nilai permulaan ‘**F**’.*
- [6 marks]  
[6 markah]

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

- CLO1  
C1 a) List any **TWO (2)** types of selection control structure in C++ programming.  
*Senaraikan mana-mana **DUA (2)** jenis struktur kawalan pilihan dalam pengaturcaraan C++.*

[2 marks]

[2 markah]

- CLO1  
C2 b) Describe **TWO(2)** differences between **'break'** and **'continue'** in jump statement.  
*Huraikan **DUA(2)** perbezaan di antara **'break'** dan **'continue'** dalam pernyataan 'jump'.*

[4 marks]

[4 markah]

- CLO1  
C2 c) Identify the **CORRECT** output in Figure B2(c).  
*Kenal pasti output yang **BETUL** bagi Rajah B2(c).*

```
int i = 1;
while (i < 5)
{
    cout << i << endl;
    i++;
}
```

Figure B2(c) / Rajah B2(c)

[4 marks]

[4 markah]

- CLO1  
C3
- d) Identify the output that will be displayed based on the program given in Figure B2(d).

*Kenal pasti output yang akan dipaparkan berdasarkan aturcara yang diberikan di dalam Rajah B2(d).*

```
#include <iostream>
using namespace std;
int main()
{
    int num = 1;
    switch (num)
    {
        case 1:
            cout << "\nONE 1";
        case 2:
            cout << "\nTWO 2";
        case 3 :
            cout << "\nTHREE 3";
        default:
            cout << "\nNot 1, 2 or 3";
    }
    cout << "\nThank You";
    return 0;
}
```

Figure B2(d) / *Rajah B2(d)*

[5 marks]

[5 markah]

- CLO1  
C1
- e) Define array and state one type of array in C++.

*Takrifkan tatasusunan dan nyatakan satu jenis tatasusunan dalam C++.*

[3 marks]

[3 markah]

- CLO1  
C2
- f) Declare a variable named 'Age' and declare a pointer named 'P\_Age' that will hold the address of variable 'Age'.

*Isytiharkan pemboleh ubah bernama 'Age' dan isytiharkan pemboleh ubah penuding bernama 'P\_Age' yang akan memegang alamat pemboleh ubah 'Age'.*

[4 marks]

[4 markah]

- CLO1 g) Identify the output that will be displayed based the on program given in Figure  
C3 B2(g). Assume that the address of variable named *number* is *0x7ff*.

*Kenal pasti output yang akan dipaparkan berdasarkan program yang diberikan dalam Rajah B2(g). Andaikan alamat pembolehubah bernama **number** ialah **0x7ff**.*

```
#include <iostream>
using namespace std;
int main()
{
    int number = 10;
    int *Pnumber;
    Pnumber = &number;
    *Pnumber = 15;

    cout << "number = " << number << endl;
    cout << "Pnumber = " << Pnumber << endl;
    cout << "*Pnumber = " << *Pnumber << endl;
    cout << "&number = " << &number << endl;
    return 0;
}
```

Figure B2(g) / *Rajah B2(g)*

[4 marks]

[4 markah]

- CLO1 h) Illustrate in table of **two-dimensional** array that has been declared and initialized  
C3 in Figure B2(h).

*Ilustrasi dalam jadual bagi tatasusunan **dua dimensi** yang telah diisytiharkan dan diberi nilai awal dalam Rajah B2(h).*

```
float temp[3][2] = { 37.5, 37.4, 38.0, 36.3, 36.5 };
```

Figure B2(h) / *Rajah B2(h)*

[4 marks]

[4 markah]

**QUESTION 3****SOALAN 3**

- CLO1  
C1
- a) List **TWO(2)** types of function in C++.  
*Senaraikan **DUA(2)** jenis fungsi di dalam C++.*
- [2 marks]  
[2 markah]
- CLO1  
C2
- b) Declare function definition named '**Sum**' that will return **integer** value and will accept two **integer** parameters which are **x** and **y**.  
*Isytiharkan definisi fungsi yang bernama '**Sum**' yang akan memulangkan satu nilai **integer** dan akan menerima dua parameter **integer** iaitu **x** dan **y**.*
- [6 marks]  
[6 markah]
- CLO1  
C2
- c) Explain **TWO(2)** differences between function call by value and function call by reference.  
*Terangkan **DUA(2)** perbezaan diantara panggilan fungsi melalui nilai dan panggilan fungsi melalui rujukan.*
- [4 marks]  
[4 markah]

CLO1  
C3

- d) Write the output that will be displayed based the on program given in Figure B3(d).  
*Tuliskan output yang akan dipaparkan berdasarkan aturcara yan diberikan dalam Rajah B3(d).*

```
#include<iostream>
using namespace std;

void main()
{
    int Add_Num(int);
    int a = 4;
    cout << "\n\nValue of A is = " << a;
    cout << "\nValue received from function is = " << Add_Num(a);
    cout << "\nValue of A is = " << a;
}

int Add_Num(int X)
{
    X = X * 2;
    return X;
}
```

Figure B3(d) / *Rajah B3(d)*[3 marks]  
[3 markah]**SOALAN TAMAT**