

Time : 3 Hours]

[Maximum Marks : 60

- Note :** (i) Answer all questions.
(ii) Marks allotted to each question are given in the right-hand margin.
(iii) Use C++ programming language to answer the programming questions.

1. Define the following : [1 × 4 = 4]

a) Teleconferencing

b) Sorting

c) Telnet

d) www



2. a) Can FTP Server be connected if there is no account of mine in it? What will be the login name? [1]

b) Explain three data Transmission model. [3]

c) Distinguish the following : [2 × 3 = 6]

i) MICR and OMR

ii) Logical & Physical Records

iii) Shell Connection & TCP-IP Connection



- d) Name the two types of access that you can give to the users for sharing files and printers attached to your Computer. [1]
3. a) Which of the following identifiers can't be used for naming variable, constants or function in a program : Hello_Sir, CP+SP, For, INCLUDE, default. [1]
- b) Name the header files to which the following built-in functions belong. [1 × 2 = 2]
- i) getchar()
- ii) strcat ()
- c) Contrast Implicit & Explicit Type conversion. Give Example. [2]
- d) Explain the following terms with example from C++. [2 × 2 = 4]
- i) Encapsulation
- ii) Polymorphism
- e) Write a program to accept a number and print maximum and minimum digit in that number. [3]
4. a) What is the difference between '=' and '==' operator. Give example in support of your answer. [2]



- b) Find the syntax error from the following program. Justify each error. [2]

```
void exam(float a2)
{
    cout<< 'The argument is'<<a2;
```

```
void main()
```

```
float a1 = 11.0;
```

```
exam(a2);
```

- c) Assume an integer variable num. Write a C++ statement using conditional operator to display 'ODD' if num is odd and "EVEN" otherwise. [1]

- d) Write the output of the following program : [3]

```
#include<iostream.h>
```

```
void main()
```

```
{
```

```
static int i = 5;
```

```
if(i > 0)
```

```
cout << i--;
```

```
main();
```

```
}
```



e) Write a function VERIFY () in C++ which accepts a character as an argument and checks whether it is a digit or not? [3]

5. a) Write a program to find the smallest number in an integer array of size 15. [4]

b) Predict the output of the following program : [2]

```
#include<iostream.h>
```

```
int main (void)
```

```
{
```

```
int i = 122;
```

```
while (i != 97)
```

```
    i--;
```

```
while (i > 65)
```

```
    i--;
```

```
printf ("%c", i);
```

```
return 0;
```

```
}
```

c) Define a class 'WORLD CUP' with the following specification : [3]

Private members:

MATCH_ID

Numeric

Venue

String

Date

String

Team1

String

Team2

String



Public members:

- A constructor that initializes all numeric members with '0' and all string with "ABC".
- Accept() _ that accepts the entire data
- Show() _ that displays the entire data

d) Consider the following class definition and answer the question that follow : [3]

Class Toys

```
{  
  
    char toy_type[10];  
  
    protected:  
  
        float price;  
        void cal_price(float);  
  
    public:  
  
        Toys();  
        char choice;  
        void toyinput();  
        void toyshow();  
  
};
```

class MyToys:Protected Toys

```
{  
  
    char mtoy_name[10];  
    float weight;  
    protected :  
        int no_wheels;  
    public :  
        void my_Input();  
  
}
```



- i) Which type of inheritance is shown in the above example?
- ii) Which all data members are accessible from MyInput()?
- iii) Name the member functions which are accessible from the object of class MyToys?

6. a) Give a C++ statements to do the following : [2]

- i) Create an integer ptr
- ii) Make ptr hold the address of integer variable var.

b) Declare a structure COMPLEX no having real part and imaginary part as its members.

Put it inside a class number and initialize its members with/without a constructor.



[2]

c) Write a float variable to create an alias of a float variable as function. [1]

d) Describe two methods to open a data file in C++. [2]

e) Assuming the class HOSPITAL defined below, write a user defined functions to read the objects of HOSPITAL from the binary file Hospi.dat and display the records of only 'Surgical' department : [3]

```
class HOSPITAL
```

```
{
```

```
    int Patient_id;
```

```
    char Patient_name[13];
```

```
    char OPD_Date[10];
```

```
    float fees;
```

```
    char Dept[20];
```



public:

void enterdata()

{

cin>>Patient_Id

gets(Patient_name);

gets (OPD_Date);

cin>>fees;

gets(Dept);

}

void showdata()

{

cout<<Patient_Id<<Patient_name

<<OPD_Date<<fees<<Dept;

}

char []getdept();

{

return Dept;

}

};



▽▽▽▽

char Patient_name[13];

char OPD_Date[10];

float fees;

To Score better in NIOS and Good percentage Contact @ 1800-120-6077

