

This question paper consists of 6 questions and 7 printed pages.

Roll No.

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Code No. 51/SS/O

SET **A**

COMPUTER SCIENCE
(330)

Day and Date of Examination _____

Signature of Invigilators 1. _____

2. _____

General Instructions :

- 1 Candidate must write his/her Roll Number on the first page of the Question Paper.
- 2 Please check the Question Paper to verify that the total pages and total number of questions contained in the Question Paper are the same as those printed on the top of the first page. Also check to see that the questions are in sequential order.
- 3 Making any identification mark in the answer-book or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
- 4 Write your Question Paper Code No. **51/SS/O, Set-A** on the answer-book.



COMPUTER SCIENCE

(330)

Time : Hours]

[Maximum Marks : 60

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

- 1** Define the following : **1×5=5**
- (a) Memory
 - (b) Optical Mark Recognition
 - (c) Protocol
 - (d) Topology
 - (e) Start button.
- 2** (a) Differentiate between the following : **2×3=6**
- (i) Field and Record
 - (ii) Procedural oriented language and Problem oriented language
 - (iii) LAN and WAN
- (b) What do you understand by Email, FTP, www and Java ? **4**
- 3** (a) Discuss any four basic concepts used in object oriented programming ? **4**
- (b) (i) Write a C++ program that reads two values a and b; exchange their contents and print the output. **3**
- (ii) If value of a variable c is 6, write a C++ statement(s) to assign the value of c as integer, constant, float and character. **2**



- (c) Identify the error(s), if any in the following programs and write them in correct format underlining the error(s). 3

```
#include <iostream.h>

void main( )

int x, y;

c in <<y; <<x;

if (x > y) Big = x

}
```

- 4 (a) What do you understand by structure in C++ ? Write a structure for the record using following : 3

Part No : Integer

Part Name : String of 25 characters

Part Price : Decimal Number may be included

Name this structure PARTDETAIL.

- (b) (i) Rewrite the following program segment using a while loop : 3

```
i=2;

start :

cout<<i;

i+=2;

if(i<51) goto start;

cout<<"\nThank you";
```



(ii) What is the output of the following C++ program :

3

```
#include <iostream.h>

#include <conio.h>

float y=25.8

void check( )

{

    y+=2;

    cout<<"\ny="<<y;

}

void main( )

{

    clrscr( );

    float y=12.3;

    cout<<"\ny=" <<y;

    check( );

    cout<<"\ny="<<y;

    getch( );

}
```

5 (a) (i) Write a program in C++ that input 10 numbers from the user in one dimensional array and search a data (input by user) in the array.

5



- (ii) What will be the output of following program ? 1

```
#include <iostream.h>

void main( )
{
    int a[5], t;
    for (i=0; i<5; i++)
        a[i]=5*i;
    for (i=0; i<5; i++)
        cout<<a[i];
}
```

- (b) Write a C++ program to write into file notes.txt corresponding to following structure : 5

Struct Notes

```
{
    char subject [15];
    int no-of-pages;
};
```

Write one record into the file.

- 6 (a) (i) Answer the following questions briefly :

Construct function prototypes for descriptions below :

(1) xyz() takes a float argument and returns an integer value. 1

(2) xyz() takes no argument and has no return value. 1



(ii) What is the output of following program ?

2

```
void main( )
{
    int i
    for (i=1; i<=5, i++)
    sum (i);}
void sum (int n)
{
    auto int s=0;
    s=s+n
    cout<<s<<"\n";
```

(b) Define Abstract class. Consider the following class declaration.

3

```
class garden
{
    char location[20]
    protected;
    int no-of-plants;
    public :
    void input data (char, int)
    void output data( );
};

class plants : protected garden
{
    int plant_size;
    protected :
    int leaf-size;
    Public :
    void readdata (int, int);
    void writedata( );
};
```

(i) Name the base class of plants and derive class of garden.

(ii) Name the data member(s) that can be accessed from function writedata().



- (c) Define a class STUDENT with following specifications : 3

Private members of the class

Name - a string of 20 characters

rollno - non-decimal value

marks - non-decimal value

Public members of the class :

getdata() - to input the data

putdata() - to output the data

Write a main program to display the data.

- (d) Define pointer using an example. What is the output of following program segment : 3

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

```
void main( )
```

```
{
```

```
    char * stu 2 = "work as a pointer";
```

```
    cout<<stu2<<"\n";
```

```
    stu 2++;
```

```
    cout<<stu2;
```

```
}
```

