

# C++ PROGRAMMING

## ASSIGNMENT-2

Date - 16<sup>th</sup> June 2021

1)

Ans.) (d) STACK

2)

Ans.) (C) Compile error in line "Base \*bp = new Derived;"

3)

Ans.) (a) Inaccessible

4)

Ans.) (b) Destructor is called only once.

5)

Ans.) (B) False

## SHORT ANSWER TYPE QUESTION

Q) Explain about new and delete keywords with code.

Ans. \* New Keyword :-

The new operator denotes a request for memory allocation on the free store. If sufficient memory is available, new operator initializes the memory and returns the address of the newly allocated and initialized memory to the pointer available.

## # Object Oriented Programming:-

It can be defined as programming model based upon the concept of objects.

Then object contains data in form of attributes and code in form of methods.



2) Parametrized:- It is possible to use constructor to initialize an object when it is created. To create a parametrized constructor, simply add parameter to the way you would to any other function.

# Example:-

e = Example (0, 50);

e (0, 50)

3) Copy Constructor:- A copy constructor is a member function which initializes an object using another object of the same class.

Que 3.

Ans.

Procedural:-

Procedural Programming can be defined as programming model which is derived from structural programming based upon the concept of calling procedure. Procedure also known as routines.

2) Parameterized:-

It is possible to pass arguments to constructor. Typically, these arguments help initialize an object when it is created. To create a parameterized constructor, simply add parameter to it the way you would to any other function.

# Example:-

e = Example (0, 50);

e (0, 50)

3) Copy Constructor:- A copy constructor is a member function which initializes an object using another object of the same class.

Que 3.

Ans. Procedural:-

Procedural Programming can be defined as programming model which is derived from structured programming based upon the concept of calling procedures. Procedures also known as routines.



Ques.

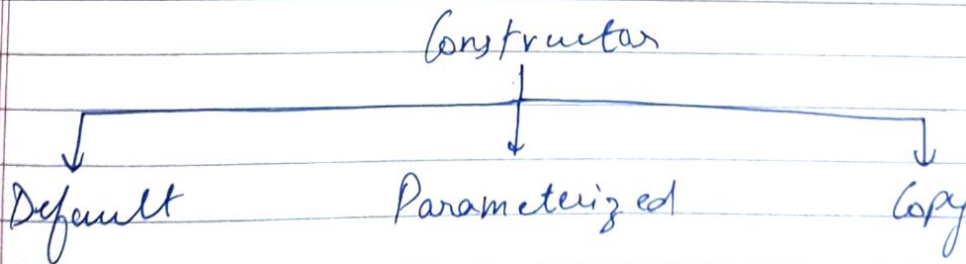
Ans.

A constructor is a member function of a class which initializes object of a class. In C++, constructor is automatically called when object (instance of class) create. It is special member function of the class.

Need :-

A constructor is different from normal functions. Constructor don't have return type. A constructor is automatically called when an object is created. Moreover if we don't specify constructor it generate default constructor.

Types :-



1) Default :-

Default constructor is the constructor which doesn't take any argument. It has no parameters.

# Syntax :- (new)  
To allocate memory of any data type, the syntax is:-

pointer-variable = new data-type;

# Example :- (new)

```
int *p = NULL;  
p = new int;
```

OR

```
int *p = new int (25);
```

# Delete Keyword:-

Since it is programmer's responsibility to deallocate dynamically allocated memory, programmer are provided delete operator by C++ language

# Syntax :- (Delete)

delete pointer-variable

# Example :- (Delete)

```
delete p;  
delete q;
```