End Semester/Retest Examination , 2020

Semester: V (old)

Object Oriented Methodology(OOM)

Subject Code: Co-505

Total Marks: 70 Marks **Time: (1+2) Hrs**

PART – A

(Total Mark : 25)

(This part consists of 5 questions each of which carries five mark equally. All the questions are compulsory)

Mark shown against the question

Q1) **Fill in the blank** **1x5=5**

a) A class puts together _____ and _____ as a single entity
b) _____ members of a class are accessible by the outsider of the class
c) _____ members of a class are sharable by all the object of that class
d) Name of destructor of a class is preceded by_____
e) ____ operator is used to allocate memory dynamically in C++

Q2) **Write down whether the followings are true or false** **1x5=5**

a) A pointer is a static data structure
b) A class is a data type
c) Constructors and destructors must be defined in a class by the programmer
d) Dynamic data structure are not supported in c++
e) Subclass pointer can points to the object of the base class

Q3) choose the appropriate option **1x 5=5**

i) When a function is defined inside a class the function is called
a) Inside function
b) Class function
c) Inline function
d) Interior function

ii) A static member function can access
a) Both static and non-static member data
b) static member data only
c) non-static member data only
d) neither static member data nor non-static member data

iii) Regarding a destructor which one of the followings is true
a) a destructor helps to create an object
b) a destructor must have a return data type
c) a destructor is called by the compiler
d) a destructor can be overloaded

iv) A base class is also known as _____ class
a) Basic

b) Super
c) Inherited
d) sub

v) What will be the output of the following code

```
{
int a;
a=5+3*6/2;
cout<<a;
}
```

a) 45
b) 11
c) 14
d) None of the above
e)

Q4) **Answer the following in a single word/sentence** **1x10=10**

a) Which feature of OOPS focuses on functionality of objects hiding details?
b) Name the operator used with 'cout'
c) Which access specifier blocks the unauthorised access of members of a class?
d) Which non-member function of a class can access its private and protected members?
e) What is the name of the parameter used in templating a function or a class?
f) Name the constructor which has no formal arguments.
g) In which type of inheritance a subclass can be derived out of many base classes?
h) What is a perfect virtual function?
i) What is an abstract class?
j) What is the use of function template?

PART – B

(Total Mark : 45)

(This part consists of 6 questions each of which carries 9 mark equally. Out of six answering any five questions are compulsory.)

Q1) Answer the followings 5+4=9

a)Explain briefly the main features of OOPS.
b) How does an inline function differ from a macro?

Q2)What do you mean by data type? what is the importance data type in programming? Discuss about the basic and user defined data types used in c++. 2+2+5=9

Q3 differentiate between 3x3=9

a) Default Constructor and parametric constructor
b) Static member data and non-static member data
c) Function overloading and function overriding

Q4) Differentiate between early binding and late binding? Write a c++ program to realise the concept of pure virtual function 3+6=9

Q5) What is template ? How does this help the programmer in programming? Write a c++ program to add any two number of any type realising the concept of template function and template class 2+2+5=9

Q6) Write short notes **(any three)** 3x3=9

a) Friend function
b) Abstract Class
c) scope resolution operator
d) Multiple inheritance

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