# OBJECT ORIENTED PROGRAM MING USING C++ $4^{\text {th }}$ Exam/ COM P/ IT/ CSE/ 0623/ Nov'17 

## Duration: 3Hrs.

M.Marks. 75

## SECTION-A

## Q1. Do as directed.

15x1=15
a. The instance of a class is called $\qquad$ _.
b. Objects are used to model $\qquad$ entities.
c. Define preprocessor.
d. Define encapsulation.
e. A function can return $\qquad$ value via return statement.
f. Execution of $\mathrm{C}++$ programs begins at $\qquad$ _.
g. _____r refers to the names of variables, functions, arrays, classes etc.
h. Objects are destroyed in order of their creation. (T/F)
i. A bit field can be of integer type only. (T/F)
j. The constructors that take arguments are called $\qquad$ _.
k. A class is a way to bind $\qquad$ and $\qquad$ together in a single unit.
I. Unary operators work on $\qquad$ operands.
m . Operator overloading is giving new meaning to $\qquad$ operators.
n. A full statement can be represented by a $\qquad$ _.
o. The extension of a $\mathrm{C}+$ program is $\qquad$ .

## SECTION-B

Q2. Attempt any six questions.
$6 \times 5=30$
i. Difference between structure and union. Explain with example.
ii. What is friend function? Explain by giving suitable example.
iii. What is the difference between nesting and inheritance?
iv. What is the need of operator overloading? Explain with example.
v. What is an array? How it is declared and used in $\mathrm{C}+\mathrm{t}$.
vi. Why files are used in OOP?
vii. What is class concept? Explain with suitable example.
viii. Explain the importance of destructors.
ix. What is difference between while and do-while loop?

## SECTION-C

Q3. Attempt any three questions.
a. Explain various types of loops used in $\mathrm{C}++$ with suitable example.
b. Write a program to overload unary minus operator in C+H.
c. Define the following: (any two)
i. Data hiding and Encapsulation.
ii. Static functions.
iii. Virtual destructor.
d. What is the use of constructor function in a class? Give a suitable example.
e. Explain the difference between single and multiple inheritances with example.

