(Following Paper ID and Roll No. to be filled in your Answer Books)

PAPER ID : **Roll No.**

M.C.A.
Theory Examination (Semester-II) 2015-16
OBJECT ORIENTED SYSTEMS AND PROGRAMMING WITH C++

Time : 3 Hours *Max. Marks : 100*

SECTION – A

1. Attempt all parts of this question. **(10X2 = 20)**
a) Describe Aggregation.
b) Discuss Generalization.
c) What is a Constraint?
d) What is JSD?
e) Discuss relationships of UML.
f) Discuss Diagram of UML.
g) What is throw ( ) and catch?
h) What do you mean by Garbage Collection?
i) Discuss Inline functions.
j) What is an Exception?

SECTION – B

2. Attempt any five parts of this question. **(5X10 = 50)**
a) Discuss Inheritance. Discuss its types.
b) What is a DFD? Give example.
c) Discuss UML terminology in detail.
d) Discuss Operator Overloading with example.
e) Discuss Polymorphism. Differentiate between Compile Time and Run time Polymorphism. Give example.
f) Discuss OMT Methodology. Compare OMT with SA | SD
g) Write short note on testing of Object Oriented Systems
h) What is file stream? Give Example

SECTION – C

Attempt any two questions. **(15X2=30)**
3. Attempt the following
    a) What are Candidate keys ?
    b) What do you mean by Abstract class ? Give example.
    c) Discuss Object and Classes. Give examples.

4. Attempt the following
    a) Distinguish between Template class and Template function.
    b) Discuss pointers to objects with example.
    c) Discuss State based Testing.

5. Attempt the following
    a) Discuss with example friend function.
    b) Discuss Constructers and Destructors. Give example.
    c) Discuss standard C++ String Class.