END TERM EXAMINATION

SECOND SEMESTER |MCA| MAY- JUNE 2016

Paper Code: **MCA-104**

Subject: Object Oriented Programming In C++

Note: Attempt any five questions including Question 1 which is compulsory.

Question 1: Answer the following:

(a) Write a brief history about C++. Explore its formulation and applicability. (7)

(b) What is object oriented programming (OOP)? (6)

(c) Explain briefly the features of OOP. (6)

(d) Differentiate between C and C++ (6)

Question 2:
(a) Differentiate between Encapsulation and Abstraction (5)

(b) What is meant by message passing and dynamic binding? (7.5)

Question 3:
(a) What is polymorphism? Explain with an example. (5)

(b) What are pointers? Explain their usage with an example. (7.5)

Question 4:
(a) What are different types of operators in C++? (5)

(b) Elaborate constructors and destructors. Discuss their types. (7.5)

Question 5:
(a) What are access modifiers and scope resolution operator? Provide and example for each. (7.5)

(b) Explain friend function quoting an example. (5)

Question 6:
(a) Define inheritance. Explore the types of inheritance. (7.5)

(b) What are different types of polymorphism supported in C++ (5)

Question 7:
(a) Quote an example of input procedures in relevance to files. (5)

(b) What are exceptions? Explain the exception management. (7.5)

Question 8:
(a) What is generic programming? (5)

(b) Elaborate classes, data structures and functions in the view of generic programming.
(7.5)

Question 9:
(a) Exemplify binary search using template function. (7.5)

(b) Write short note on Standard Template Library (STL) (5)