



M 27340

Reg. No. :

Name :

II Semester M.A./M.Sc./M.Com. Degree (Reg./Sup./Imp.)

Examination, March 2015

MATHEMATICS

(2013 & Earlier Admn.)

Paper – IX : Computer Programming in C++

Time : 2 Hours

Max. Marks : 36

Instructions : 1) **Part – A :** Answer **any three** questions. **Each** question carries **3** marks.

2) **Part – B :** Answer **any three** questions without omitting any Unit. **Each** question carries **9** marks.

PART – A

Answer **any three** questions. **Each** question carries **3** marks.

(3×3 = 9)

- I. a) What is the role of virtual function in C++ ? Explain.
- b) Write a note on private member function in C++.
- c) Differentiate between OOP and POP.
- d) What is meant by multiple constructor ? Explain.

PART – B

Answer **any three** questions without omitting **any** Unit. **Each** question carries **9** marks.

(3×9 = 27)

Unit – I

- II. a) Explain destructor and dynamic constructor.
- b) Explain polymorphism.
- c) Write a C++ program to print the name, age and address using container class (The class person contains name and age, class address contains the address).

P.T.O.



- III. a) Explain operator overloading.
- b) What is a structure ? Explain the relationship between structure and class.
- c) Write a C++ program to print the value of a and b using copy constructor (The values of a and b are read from the keyboard at runtime).

Unit – II

- IV. a) Explain how pointer to function related to static and non-static member function ?
- b) Explain the relation between virtual function and inheritance.
- c) Write a C++ program to generate Fibonacci series upto n.
- V. a) Explain the benefits of OOPs.
- b) Write a note on incrementing and decrementing pointers.
- c) Write a C++ program for string operations using function overloading (read, copy, compare and concatenation).

Unit – III

- VI. a) Explain the use of inheritance in C++.
- b) Write a note on the unary operators new and delete.
- c) Write a C++ program to print the name, mark and age using single inheritance (age is declared in the inherited class).
- VII. a) Illustrate the advantages of derived construction in C++.
- b) Write a note on visibility labels used in a class.
- c) Write a C++ program to check whether the given year is leap year or not.
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