

67045

MCA 1st Semester Current Scheme with new notes
Maximum Marks scheme 80 Examination,
December- 2015

OBJECT ORIENTED PROGRAMMING USING C++
Paper-MCA-105

Time allowed : 3 hours] [Maximum marks : 80

Note : Question No. 1 is compulsory. Attempt four more questions, selecting one from each unit.

1. Answer the following questions briefly :

- (a) List advantages of friend function in C++.
- (b) What are iostreams.
- (c) Define static members in C++.
- (d) Write uses of templates in C++.
- (e) Explain prototypes in C++.
- (f) Describe resource capture.
- (g) What are unexpected exceptions in C++.
- (h) List advantages of recursion. $8 \times 2 = 16$

Unit-I

2. (a) What are structure and arrays ? How these are useful and used ? Discuss in detail with examples and C++ codes. 8
- (b) Discuss uses and advantages of pointers in C++ with examples. 8

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Unit-IV

(3)

8. (a) Define template functions ? How these are used and useful ? Discuss with examples and with C++ codes. 8
- (b) Explain string, hashes and iterators in C++ through examples. 8
9. Explain the following with examples :
- (i) Advantages of Generic programming in C++ 16
- (ii) Role of Template classes in O programming. 16

(2)

Unit-II

3. Explain the following briefly with suitable examples :
- (i) Flow control and user defined data types in C++ 8
- (ii) Uses and advantages of dynamic polymorphism in C++. 8 each

Unit-III

4. (a) Define destructors ? How these are useful and used ? Explain its types with examples and C++ code segments. 8
- (b) Explain use and advantages of virtual functions in detail with C++ codes. 8
5. Describe the following with examples :
- (a) Use of object slicing in C++ 16
- (b) Constructors and its advantages. 16

6. (a) Define memory management ? How it is used and useful ? Explain with suitable examples and C++ code segments. 8
- (b) Develop a program in C++ to overload “+” and “-” (minus) operators. 8
7. Explain the following with examples :
- (i) Prototypes and its advantages in C++ 16
- (ii) Object copying in C++. 16