Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT) (2015 Onwards) (Sem.–1) OBJECT ORIENTED PROGRAMMING IN C++ Subject Code : MSIT-102 M.Code : 72518

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

- 1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.
- 2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

- 1. Discuss the advantages of OOP and compare OOP approach with functional programming approach.
- 2. a) Discuss various data types available in C++ language.
 - b) Explain the need of type conversion with the help of suitable example in C++.

SECTION-B

- 3. a) Write a program in C++ to show the use of recursion.
 - b) How structure is different from union and enumeration?
- 4. a) Discuss the nesting of structures with the help of suitable program in C^{++} .
 - b) Discuss the use of pointers in C++ with the help of suitable code.

SECTION-C

- 5. What is the relationship between class and an object? Write a program in C++ to show the use of nested classes.
- 6. a) Explain with examples the three ways in which a class can be inherited,
 - b) What are different types of derivations in C++?

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SECTION-D

- 7. Write a program in C++ which reads a line of text and stores into file and then print the file contents in reverse order.
- 8. a) What is the difference between early binding and late binding?
 - b) What is the difference between virtual functions and pure virtual functions?

SECTION-E

9. Answer briefly :

- a) How constant is declared in C++?
- b) What are preprocessor directives?
- c) What are the benefits of friend function?
- d) What do you mean by header file?
- e) What is a function?
- f) What are inline member functions?
- g) What are container classes?
- h) What is a virtual destructor?
- i) What are binary file operations?
- j) What is meant by abstract base class?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.