| No. | Total No. of Pages : 02 |
|-----------------------------|-------------------------|
| Total No. of Questions : 18 | |

M.Sc. IT (Sem.-1)
OBJECT ORIENTED PROGRAMMING IN C++

Subject Code : MSCIT-102 M.Code : 72518

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS 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. What are various data types available in C++ Programming? How are the different ways to declare and initialize a variable in C++? What are the rules to name an identifier?
- 2. a) Illustrate the use of the following statements :
 - i. If else
 - ii. Switch-case 4
 - b) What is the difference between while and do while statements? Which control statement is required to skip an iteration if some condition becomes true?

SECTION-B

- 3. Write a function ADD in C++ for adding an integer variable with float and returning the float result. Indicate the function definition and function signature in the code. Mention if typecasting is required in the function or not. 10
- 4. What is the difference between a union and a structure? Declare a structure named Course with a field for storing the name of course, a field for storing the course Id and a field for storing the number of students enrolled in course. 10

1 | M-72518 478

SECTION-C

What is the use of constructor and destructor? Explain the different types of constructors 5. with examples in C++. Can we have multiple destructors? 6. What is the use of the following keywords: a) inline b) static c) friend Support your answer with C++examples. 10 SECTION-D What do you understand by function overloading and overriding? How are these achieved 7. in C++? 10 8. Write short notes on: a) File Handling 10

SECTION-E

10

Write briefly:

- 9. What is the use of goto keyword?
- 10. Write the syntax for for loop?

b) Exception handling

- 11. How type conversion is done in C++?
- 12. What are the default access specifier for data members in structure and class respectively? 13. What is an enumeration? 14. What is virtual function?
- 15. In which header file keyword 'cout' is defined?
- 16. List the arithmetic operations which can be applied on a pointer variable.
- 17. List the different storage classes available in C++.
- 18. What is multi-level inheritance?

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

2 | M-72518 478