2017

MCA

3rd Semester Examination OBJECT ORIENTED PROGRAMMING LAB.

PAPER—MCA 306
Subject Code—32
(Practical)

Full Marks: 100

Time: 3 Hours

The figures in the right hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer any two questions (on lottery basis).

2×35

- 1. Write a C++ program to design a class having static member function named showcount () to display the number of objects created of the class.
- 2. Write a C++ program that creates and uses array of object of a class.
- 3. Write C++ program using a class to illustrate the use of objects as function arguments.
- 4. Write a C++ program to show the use of friend function.
- 5. Write a C++ program to illustrate single inheritance where a base class is publicly inherited by a derived class.
- 6. Write a C++ program to illustrate single inheritance where a base class is publicly inherited by a derived class.
- 7. Write a C++ program to illustrate multilevel inheritance.

- 8. Write a C++ program to illustrate multiple inheritance.
- 9. Write a C++ program to swap private data members of two classes using friend function.
- 10. Write a C++ program to design a class complex to represent complex numbers. The complex class should use an external function (use it as a friend function) to add two complex numbers. The function should return an object of type complex representing the sum of two complex numbers.
- 11. Write a C++ program to copy data of an object to another object using copy constructor.
- 12. Write a C++ program to allocate memory dynamically for an object of a given class using class's constructor.
- 13. Write a C++ program to design a class to represent a matrix. The class should have the functionality to insert and retrieve the elements of the matrix.
- 14. Write a C++ program to show the use of static data member.
- 15. Write a C++ program to illustrate the overloading of unary minus.
- 16. Write a C++ program to illustrate the overloading of + operator.
- 17. Write a C++ program to illustrate the overloading of binary operator using friends.
- 18. Write a C++ program to find maximum of two numbers using friend function where a number is a member of first class and another number is a member of second class.
- 19. Write a C++ program to illustrate Hybrid inheritance.
- 20. Write a C++ program to search employee details.

Viva-voce — 20Marks

Practical Note Book - 10Marks