## MCA 3rd Semester Examination, 2019

## **OBJECT ORIENTED PROGRAMMING**

(Practical)

PAPER -MCA-392

Full Marks: 100

Time: 3 hours

The figures in the right hand margin indicate marks

Answer any two questions selecting on lottery basis:

 $35 \times 2$ 

- 1. Write a C++ program to demonstrate constructor overloading with default arguments.
- 2. Write a C++ program to demonstrate any unary operator overloading using friend function.

- 3. Write a C++ program to demonstrate the hybrid inheritance concept.
- 4. Write a C++ program to show multiple inheritance with proper attributes and methods.
- 5. Write a C++ program to overload any binary operator using member function.
- 6. Write a C++ program to demonstrate default, parameterised and copy constructor in a program.
- 7. Write a C++ program to show how static data member is accessed by objects of a class and also show the use of scope resolution (: :) operator in the same program to access the global version of a variable.
- 8. Write a C++ program to demonstrate virtual function with the use of 'this' pointer.

- 9. Write a C++ program to demonstrate the dynamic constructor.
- 10. Write a C++ program to create a file and then write some data into the file.
- 11. Write a C++ program to create a function template and class template. Then use the templates in your program.
- 12. Write a program to show exception handling.
- 13. Write a C++ program to read and display ten data records using array of objects.
- 14. Write a C++ program to demonstrate friend function and also friendship between two classes to access the private data of one class from another class.

- 15. Write a C++ program to demonstrate hierarchical inheritance.
- 16. Write a C++ program to show the compile time polymorphism concept.
- 17. Write a C++ program to demonstrate destructor function with:
  - (i) Create two blocks, each block has two objects with a message.
  - (ii) Display a message of which number of object is destroyed.
  - (iii) Total number of objects will be 10 in your program.
- 18. Write a C++ program to demonstrate inline function, reference variable and default argument.

Viva-voce - 20 Marks

Laboratory Note Book - 10 Marks