2015

MCA

3rd SEMESTER EXAMINATION

OBJECT ORIENTED PROGRAMMING LAB

(PRACTICAL)

PAPER—MCA-306

Full Marks : 100

Time : 3 Hours

The figures in the 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 compare two strings using operator overloading.

2. Write a C++ program to read a square matrix and display its transpose.

(Turn Over)

3. Write a C++ program using pure virtual functions.

4. Write a C++ class 'Complex' and overload +, *, >>, << operators for adding, multiplying input and output complex numbers.

5. Write a C++ program to multiply two matrices using operator overloading.

6. Write a C++ class 'string' and overload +, >>, << operators for concatenating input and display character strings.

7. Write a C++ program to implement default constructor, copy constructor and overload = operator.

8. Write a C++ class and overload =, () and [] operators.

9. Write a 'student' class in C++ having data members name, roll and marks. Write the student objects in a file and retrieve the objects from the file.

10. Write a C++ program to show how exception is handled in C++.

11. Write a C++ program to implement your own namespace and show the usability of 'using declaration' and 'using directive'.

12. Write a C++ program to overload new and delete operators.

13. Write a C++ program to implement hybrid inheritance.

14. Write a C++ program to implement a class 'Account' having data members account number, name of depositor, account type and balance amount.

    Create suitable member functions to deposit an amount, withdraw an amount and display name and balance.

15. Write a C++ program to implement Time class that has separate data members for hours, minutes and seconds. Overload + operator to add two times (objects) and ++ operator to incurrent time by one second.

16. Write a C++ program to find the number of characters, words and lines in the given text as input.

17. Write a C++ program to copy the contents of one file to another file. Provide the names of the source and destination files through command line arguments.

18. Write a C++ program to implement a data class with member functions as next and previous which return next date and previous date.

19. Write a C++ program to implement function overloading.

20. Write a C++ program to implement flight class with data members as flight no., source, destination and fare. Write a copy constructor and a member function to display the flight information.

P.N.B. — 10

Viva — 20

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