

Total No. of printed pages = 3

Co-506/OOM/5th Sem/2013/M

OBJECT ORIENTED METHODOLOGY

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer question No. 1 and any *four* from the rest.

1. Fill up the blanks : 1×10 = 10

(i) Variables of a class are called _____.

(ii) A function can be invoked by _____.

(iii) _____ is a variable which holds the address of another variable.

(iv) _____ are class members that are hidden from the outside world.

(v) Dynamic allocation of memory is done by _____ operator.

[Turn over

(vi) When the same function is used for multiple operations it is known as _____.

(vii) _____ is an instance of a class.

(viii) _____ binds data and associated functions together.

(ix) The _____ pointer stores the address of the object currently invoking a member function.

(x) _____ function takes objects as arguments.

2. (i) What is OOPs? Explain the basic concepts of OOPs. 2+6=8

(ii) Write a C++ program to find the product of two matrices. 7

3. (i) What is inheritance? Explain the various types of inheritance. 2+5=7

(ii) Explain with examples what are constructors and destructors. 8

4. (i) Explain static member variable and member function. Explain with example how to overload unary operators. 3+5 = 8

- (ii) What is virtual function? Specify any five rules for virtual function. $2+5 = 7$
5. (i) Write a C++ program to add two times (8 hrs 35 min and 6 hrs 30 min). 10
- (ii) What is a class? Explain different access modifiers in a class. 5
6. Write short notes on any *three*: $3 \times 5 = 15$
- (i) Inline function
- (ii) Function overloading
- (iii) Friend function
- (iv) Copy constructor.