M.Sc. 3rd Semester Examination, 2013

COMPUTER SCIENCE

PAPER—COS-302 (Module 1 & 2)

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks

(Object Oriented Programming)

PAPER - 302 (M1)

[ Marks : 25 ]

Answer any two questions

1. (a) What is inline function? How does it differs from the normal function?

(b) What is Constructor? Explain the role of parameterized dynamic constructor with example. \( (2 + 3) + (1 + 4) \)

(Turn Over)
2. (a) What is copy constructor? When are copy constructor called?

(b) Explain the different types of inheritance present in object oriented programming.

\[(2 + 3) + 5\]

3. (a) What is array of object? Explain by a part of programme segment. What is type casting?

(b) Justify the following statement—
"Declaration of inline function is actually a request to the compiler from the user."

(c) What is operator overloading? "What is the facilities provided for the case binary operator overloading with respect to member function over the friend function." — Justify.

(d) What is access specifier?

\[(2 + 1) + 2 + (1 + 3) + 1\]

4. (a) What is binding? What is classification of binding?

(b) What is function 'setw' and 'endl'? Explain with a suitable programme.
(c) What is cascade insertion? What is function of this keyword?

(d) Explain run time polymorphism is support method overridden. $(1+1)+3+(1+1)+3$

[Internal Assessment: 5 Marks]

(Advance Java)

PAPER - 302 (M2)

[Marks: 25]

Answer any four questions

1. (a) Briefly describe the WRAPPER classes in Java.

(b) Differentiate between public and friendly access modifier in Java. $3+2$

2. (a) What is interface? What is the major difference between interfaces and classes?
(b) Illustrate interface with a suitable Java program.

3. What is "Abstract class" in Java? What conditions must satisfied while using abstract classes? Explain it with a suitable Java program.

4. (a) Explain Final Variable, Methods and Classes.

(b) What is method overloading? Explain it with a suitable Java program.

5. (a) What is package?

(b) Write down a Java programme explain method overridden.

(c) What is instance variable.

6. (a) Explain the difference between this and super keyword.

(b) What is thread?

(c) What is abstract class explain with a part of programme segment?
7. (a) Using command line argument show concatenation of number of string is possible.

(b) What is array of object?

(c) Why we use object.nent Int().

    here object is class—type variable.

\[ 3 + 1 + 1 \]

[ Internal Assessment : 5 Marks ]