PG/IIIS/COS-302/13

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)

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.

(*Continued*)

(3)

(c) What is cascade insertion ? What is function of this keyword ?

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

[*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. 1 + 4

3. What is "Abstract class" in Java ? What conditions must satisfied while using abstract classes ? Explain it with a suitable Java program. 5

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

(b) What is method overloading ? Explain it with a suitable Java program. 2 + 3

5. (a) What is package ?

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

(c) What is instance variable. 1 + 3 + 1

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 ? 2 + 1 + 2

7. (a) Using command line argument show concatination 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]

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