

M.Sc 3rd Semester Examination, 2011

COMPUTER SCIENCE

PAPER—CS/MSC/302 (M-1/M-2)

Full Marks : 50

Time : 2 hours

The figures in the right-hand margin indicate marks

MODULE – 1

(Object Oriented Programming)

[Marks : 25]

Answer any four questions

1. (a) What is copy constructor ?
- (b) When was copy constructor called ? 2 + 3

(Turn Over)

2. (a) What is the advantage of using friend function over member function during operator over loading ?
- (b) State the limitation of inline function. 2 + 3
3. (a) Define abstract class ?
- (b) Write a program for multiple inheritance in C++. 1 + 4
4. (a) What is static members ?
- (b) Explain static data member and static member function in a single program. 2 + 3
5. Write a program to over load ++, --, == operator using friend function. 5
6. (a) What is abstraction ?
- (b) What is run time polymorphism ? Explain with a C++ program. 2 + 3

[*Internal Assessment : 5 Marks*]

MODULE – 2

(*Advanced Java*)

[*Marks : 25*]

Answer any *four* questions

1. (a) What is wrapper class ? Why do we need wrapper classes ?
(b) What is the difference between a constructor and a method ? (1 + 2) + 2

2. (a) What are the difference between process and thread ?
(b) Write a multi threaded programming using is Alive () and join () function. 2 + 3

3. (a) What is interface ? How to define an interface ?
(b) What is the difference between error and exception ? (1 + 2) + 2

4. (a) What is package ? Explain with a suitable example.
- (b) What is the use of 'final' key word. 4 + 1
5. What is polymorphism ? Differentiate between method overloading and method overriding. 1 + 4
6. (a) Write the difference between applet and application program.
- (b) What is JVM ? 3 + 2

[*Internal Assessment : 5 Marks*]
