

Total number of printed pages – 4

MCA
PCS 3006

Fourth Semester Examination – 2008

PROGRAMMING WITH JAVA

Full Marks – 70

Time : 3 Hours

Answer Question No. 1 which is compulsory
and any **five** from the rest.

The figures in the right-hand margin
indicate marks.

1. Answer the following questions : 2×10
- (a) What is abstract method ? How it is created ?
 - (b) Why does Java use Unicode ?
 - (c) Does importing a package have an impact in performance of any program ?
 - (d) What is run-time exception ?

P.T.O.

- (e) What are wrapper classes ? Explain their uses.
- (f) What are swing classes ? Why it is used for ?
- (g) Differentiate between Java interface and abstract class.
- (h) Explain different ways of creating a thread.
- (i) What are listeners ? How these are used in event handling ?
- (j) What is a constructor ? When it gets executed ?
2. (a) Write a program in Java to find Fibonacci series using recursion. 5
- (b) Write a program to create a 2-D array to accommodate integer that accepts the values and stores them in an array. Your program should display all the values and the length of the array objects. 5

3. (a) Write a Java program to use *super* to access super class members. 5
- (b) Explain multi-level inheritance in Java by appropriate example. 5
4. (a) Write a program to create a menu for Hospital system. 5
- (b) Write a program for a $n \times m$ matrix multiplication. 5
5. (a) What is overloading ? 2.5
- (b) What is the difference between *while* statement and *do* statement ? 2.5
- (c) Overridden method supports polymorphism. Justify through Java programming. 5
6. (a) Using Java program show the use of constructor, destructor and new operator. 5
- (b) How objects are passed to methods in Java. Explain with an example. 5

7. (a) What is the difference between declaring and defining a variable ? 2.5
- (b) What is Synchronization in Java ? Explain with example. 2.5
- (c) Using single string show the *println ()* statement that produce the output. 3

One

Two

Three

8. Write short notes on : 2.5 x 4

- (a) Abstract class
- (b) Different types of JDBC drivers
- (c) Different Synchronisation methods
- (d) *Switch* and *Break* statement in Java.