

1048  
B.E. (Information Technology)  
Eighth Semester  
ITE-843: Java Technologies

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Define the followings:
- Recursion
  - Package
  - Super ()
  - Synchronization
  - Finalize
  - Access control
  - Inheritance
  - Abstract class
  - Character stream
  - Entity beans

(10x1)

**UNIT - I**

- II. a) What do you mean by method overriding? How is it done in Java?  
b) Explain the Java thread model. Can we set priority among threads? Write a Java program to illustrate the concept. (6,4)
- III. Write a Java program to create a random access file that could store the details regarding the product like product code, cost and no. of items available. The user should provide all these details through keyboard and is able to add new product as well as can print the details of any product whenever required. (10)
- IV. a) Define an exception called "NoMatchException" that is thrown when a string is not equal to "India". Write a program that uses this exception.  
b) What is an Applet? Discuss its initialization and termination. Write a program to use a swing Applet in Java. (5,5)

**UNIT - II**

- V. Compare and contrast statefull and stateless session beans with suitable example. (10)

P.T.O.

(2)

- VI. Write a short note on any two of the following:-
- a) Component based architecture of J2EE
  - b) Servlet session management
  - c) Prepared database statements
- (5,5)
- VII. Make a "registration" form that collects a Name, Rollno, Branch, Semester and Email address of a student. Send the data to a servlet that displays it. If the user fails to supply a value for any of the fields in the form, you should redisplay the form but with an error message saying that the value is missing. Don't make the user re-enter values that they've entered already.
- (10)

x-x-x