C 3138

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Sixth Semester

Computer Science and Engineering

CS 1005 — ADVANCED JAVA PROGRAMMING

(Regulation 2004)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. When to use pipe stream for performing I/O operations?

2. What are the storage structures used to represent byte code?

3. What are the different communication mechanisms used by the distributed objects for their communications?

4. What are the methods in the URL class used for parsing the URL?

5. What is the use of remote reference layer?

6. When object serialization is to be invoked in the program?

7. Compare Java Server Page with Servlet.

8. Mention the various types of JDBC drivers.

9. Which types of objects are used to represent multimedia data in JAVA?

10. What are the Java technologies used to create server components?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain Byte stream and Data stream with their applicability. (8)

(ii) How to extract the methods and constructors defined in a class using reflection in Java. (8)

Or

(b) (i) Explain the implementation of thread synchronization in Java. (10)

(ii) How to invoke legacy applications in Java? (6)

12. (a) Create Socket client and Socket server for performing simple data read and write operations in Java. (16)

Or

(b) Explain the following :

(i) Secure sockets (4)

(ii) Custom sockets (4)

(iii) Java Messaging Service. (8)

13. (a) (i) Explain the architecture of Remote Method Invocation. (8)

(ii) Discuss the steps involved in creating an RMI server. (8)

Or

(b) (i) Explain the implementation of Naming service in CORBA. (6)

(ii) Create a CORBA server for performing simple deposit and withdrawal operations using Java. (10)

14. (a) (i) Compare Applet communication with socket communication. (6)

(ii) Discuss the steps involved in creating a customized tag with an example. (10)

Or

(b) (i) Explain the servlet creation with an example. (8)

(ii) Explain the steps involved in accessing a database using JDBC. (8)

15. (a) How J 2 EE architectural model is used for creating distributed system? Explain it with an example. (16)

Or

(b) (i) Explain stateful and stateless session beans with example. (10)

(ii) Compare Container Managed Persistent Entity bean with Bean Managed Persistent Entity Bean. (6)

Time

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