

1057

M.Sc. (Information Technology) Second Semester
MS-45: Advance Java and Network Programming

Time allowed: 3 Hours

Max. Marks: 80

NOTE: Attempt five questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit I- IV.

x-x-x

UNIT – I

- I. Discuss the functionality of various methods used during the lifecycle of an Applet. Why are applets considered secure web applications? Write code for creating an Applet program which draws various geometrical shapes. Describe all the steps from development till execution of an Applet. (16)
- II. a) How can you create better graphical user interfaces using swings than AWT? Discuss.
- b) Discuss the various methods of creating modal and non modal dialogs. Give suitable examples. (2x8)

UNIT – II

- III. a) What is DSN? Why is it used in JDBC applications? What are its different types? Discuss the various steps to create a DSN for using in a JDBC application.
- b) Write a note on following: DriverManager class, SQLExceptions and ResultSet. (2x8)
- IV. a) What do you understand by distributed object technology? Discuss its various features and services.
- b) Create a RMI application describing various steps involved in developing and executing client and server module which reverses the number sent by client application. (2x8)

UNIT – III

- V. a) State the differences between Servlet and CGI programs in detail.
- b) Discuss briefly about the following:-
doPost() , HttpSession class, Service () and PrintWriter class (2x8)
- VI. Discuss in detail the classes and methods used for implementing Connectionless delivery of data from client to server and vice versa. Write a simple networking 'application where client sends a data packet to server containing a string message using classes and their methods described by you. (16)

(2)

UNIT – IV

VII. a) Discuss the role of manifest files and JAR files in creation of Java Bean. How do you create the JAR files? Give suitable example.

b) Discuss the various types of EJB. (2x8)

VIII. Discuss the JSP architecture and the various implicit objects used in JSP applications. (16)

UNIT – V

IX. a) What is dynamic method dispatch?

b) How do the use of BufferedReader and BufferedWriter class help in increasing the performance of Java I/O application.

c) Discuss the various constructors of JTable.

d) What is role of stub and skeleton classes in RMI? (4x3)

e) Why is a developing web application using JSP more convenient than Servlets? Give examples. (4)

x-x-x