

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9

Sub. Code :

2	6	0	3	8
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Exam. Code :

0	4	6	0
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M.Sc. (Information Technology) 2nd Semester
(2056)

ADVANCE JAVA AND NETWORK PROGRAMMING

Paper : M.S-45

Time Allowed : Three Hours]

[Maximum Marks : 80

Note :— Attempt five questions in all by selecting one question from each Unit. Question No. IX is compulsory. All questions carry equal marks.

UNIT-I

- I. (a) What is Exception Handling in Java? Explain different types of exceptions and how custom exceptions are created. 8
- (b) Explain how Applets communicate with web pages using parameters. Describe the use of <param> tag. 8
- II. (a) Write a detailed note on AWT graphics class. Explain how shapes, colors, and fonts are handled. 8
- (b) What is the purpose of using the getContentPane() in a swing program? How do you create a user interface using swing? 8

UNIT-II

- III. (a) What is JDBC (Java Database Connectivity)? Explain its architecture and steps to connect a Java application to a database. 8
- (b) What are the advantages of using PreparedStatement in Java? 8

- IV. (a) What is the basic principle of RMI architecture? What are the layers of RMI architecture? 8
- (b) Explain the working of RMI in detail. Describe the steps involved in invoking a remote method. 8

UNIT-III

- V. (a) Explain Servlets in Java. Describe the servlet life cycle and its working with a diagram. 8
- (b) Compare Servlets and CGI. 8
- VI. (a) What is Socket Programming? Explain client-server communication using sockets. 8
- (b) What are Datagrams in networking? Explain their role in communication. 8

UNIT-IV

- VII. (a) What is JavaBeans? Explain its features and advantages. 8
- (b) Describe the elements of JSP. 8
- VIII. (a) Describe the architecture of EJB. Explain the role of EJB container and server. 8
- (b) Differentiate between JavaBeans and EJB. 8
- IX. Compulsory Question :
- (1) Give two differences between Applets and Applications in Java.
 - (2) What is serialization in JavaBeans?
 - (3) What is the difference between JSP and Servlet?
 - (4) Which file extension is used for JAR files?
 - (5) What is the role of Remote Interface in RMI?
 - (6) What is JVM?
 - (7) Give any two drivers of JDBC.
 - (8) What is a deadlock? 8×2=16