



26A TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2075 Ashwin

Exam.	Back		
Level	BE	Full Marks	80
Programme	BCT	Pass Marks	32
Year / Part	IV / I	Time	3 hrs.

Subject: - Advanced Java Programming (Elective I) (CT72501)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. What are the features that make Java an object oriented programming language? Write the history of Java. [2+4]
2. What is an event and how it is handled in Java. Explain with a sample code. [3+4]
3. What is an Applet? Describe an Applets lifecycle. [5+1]
4. Write a program to illustrate object deserialization in java. How is file management done in Java? Explain with suitable example. [4+3]
5. Write a program to illustrate the SAX parser. [5]
6. What is socket in Java networking? Explain Socket Timeouts. [7]
7. What are the types of JDBC drivers? Write a simple program to execute SQL statement in Java. [6+4]
8. Describe the role of Stub and Skeleton in Remote method call. [6]
9. How is Swing different from AWT? Explain with example. [9]
10. What is Java Beans? Explain the different properties of Java bean. [6]
11. Write short notes on: [2×5]
 - i) Byte Code verification and necessity
 - ii) Packaging Beans in JAR files
 - iii) Scripting
 - iv) User Authentication and Encryption

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TRIBHUVAN UNIVERSITY

INSTITUTE OF ENGINEERING

Examination Control Division**2074 Chaitra**

Exam.	Regular		
Level	BE	Full Marks	80
Programme	BEX, BCT	Pass Marks	32
Year / Part	IV / I	Time	3 hrs.

Subject: - Advance Java Programming (Elective I) (CT72501)

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1. Why is Java a platform independent language? Write a program to use arithmetic operators in Java. [2+4]
2. Explain event handling in Java. What user interface components are used in Java? Explain. [3+4]
3. Explain how applets are used in Java with the advantages associated with applets. [5+2]
4. Write a program to illustrate object serialization in java. Explain file management in Java. [4+3]
5. Write a program to demonstrate the DOM parser. [5]
6. Write a program to illustrate socket programming in Java. [7]
7. Explain JDBC driver types in detail. What are scrollable, updatable, row and cached row sets. [6+4]
8. Explain RMI in detail. [6]
9. Explain Rendering in AWT. [9]
10. What is java beans persistence? Explain with suitable example. [6]
11. Write short notes on: (any two) [2×5]
 - i) Bytecode Verification
 - ii) Digital signature
 - iii) Bean property types

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2073 Chaitra

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Subject: - Advanced Java Programming (*Elective I*) (CT72501)

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- ✓ Attempt **All** questions.
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1. Why is Java called architecture Neutral? Explain. [4]
2. Write a programme to handle button click event in Java. [7]
3. Write down the differences between Java applet and a stand alone Java application. Describe storage of application preferences using property maps. [4+3]
4. What is serialization and de-serialization, explain with sample code. [7]
5. Differentiate DOM and SAX parser in XML parsing. [5]
6. What is a socket? Write code to send mail using Java Mail API. [2+5]
7. a) Describe JDBC architecture. [5]
b) What is a transaction in database programming? Why should it be taken care during programming? [2+4]
8. What is web service and why are they important. [7]
9. Write on any two advance swing component with sample code. [9]
10. What is Java bean? Write about bean persistence. [4+5]
11. Write about authentication and authorization with their importance in an application. [7]

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2072 Chaitra

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Subject: - Advance Java Programming (*Elective I*) (CT72501)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. Why is Java called platform independent language? Explain. [4]
2. What is event handling? How to set up event sources and listeners? Explain with suitable example code in Java. [2+5]
3. What is an applet? Describe an applet's lifecycle? [6]
4. What is serialization and deserialization? Write a sample program in Java to illustrate serialization and deserialization. [2+5]
5. What is XML validation? How is it done in java? [2+3]
6. Write complete Java code to communicate between two programs in a network using sockets. [6]
7. What is JDBC? Explain JDBC architecture? [2+4]
8. What is SQL? How are SQL statements executed in Java? [1+4]
9. What is RMI? Discuss the architecture of RMI in details. [6]
10. Differentiate AWT and Swing? [2+5]
11. How can different shapes be rendered using AWT? Illustrate with sample code. [5]
12. What are Java beans? Discuss the significance of Java beans. [3+6]
13. What is digital signature? What is bytecode verification and why is it necessary? [2+5]
