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10CS/IS753

Seventh Semester B.E. Degree Examination, July/August 2022
JAVA & J2EE

Time: 3 hrs. Max. Marks:100

Note: ***Answer any FIVE full questions, selecting at least TWO questions from each part.***

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

PART – A

1 a. List and explain the features of Java. **(10 Marks)**
b. Discuss three OOP principles. **(06 Marks)**
c. Explain the various operators available in Java Language. **(04 Marks)**

2 a. Define exception. Demonstrate the working of nested try blocks, with suitable examples. **(08 Marks)**
b. What are Applets? Explain the different stages in the life cycle of an Applet. **(08 Marks)**
c. Briefly explain the role of interface while implementing multiple inheritance in Java. **(04 Marks)**

3 a. What is the need of synchronization? Explain with an example, how synchronization is implemented in Java? **(10 Marks)**
b. With syntax explain use of isAlive( ) and join ( ) methods. **(04 Marks)**
c. Write a program to implement producer-consumer problem, using threads. **(06 Marks)**

4 a. How AWT is different from swings? What are the 2 key features of it? Explain. **(08 Marks)**
b. Explain the following with examples for each,
(i) JTextField class.
(ii) JButton class.
(iii) JComboBox class. **(12 Marks)**

PART – B

5 a. Explain J2EE multitier architecture. **(08 Marks)**
b. Give an overview of JDBC process. **(08 Marks)**
c. What are transactions? Explain. **(04 Marks)**

6 a. Explain the life cycle of a servelt. **(06 Marks)**
b. Write a note on :
(i) Session tracking
(ii) Cookies. **(10 Marks)**
c. List and explain core classes that are provided in Javax.Servlet package. **(04 Marks)**

7 a. What is RMI? Describe with code snippet RMI at server side. **(10 Marks)**
b. Discuss different types of JSP tags. **(06 Marks)**
c. What is the difference between server side and client side Java RMI? **(04 Marks)**

8 a. Explain the various EJB transaction attributes. **(08 Marks)**
b. Explain the difference between session beans and entity beans. **(06 Marks)**
c. What is deployment descriptor? List the deployment descriptor for EJB1.1? **(06 Marks)**

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