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Seventh Semester B.E. Degree Examination, June/July 2019
Java and J2EE

Time: 3 hrs.

Max. Marks:100

**Note: Answer FIVE full questions, selecting
atleast TWO questions from each part.**

PART – A

- 1 a. Explain three kinds of variables in Java. (06 Marks)
b. What are arrays? List out the three steps to create an array. (04 Marks)
c. Describe the process of building and running Java program with an example. (04 Marks)
d. Discuss different access specifiers in Java. (06 Marks)
- 2 a. Define an Applet. Explain the skeleton of an applet with example program. (08 Marks)
b. Explain the types of exceptions in Java. (06 Marks)
c. What is difference between a superclass and subclass? Write a program to demonstrate the same. (06 Marks)
- 3 a. What are threads? Explain how to make the class threadable. (07 Marks)
b. What is synchronization? Explain producer consumer problem with a program. (09 Marks)
c. Write short notes on sources of events. (04 Marks)
- 4 a. What are swing components? Explain atleast 4 swing components. (06 Marks)
b. What are containers? Explain a simple container. (06 Marks)
c. Write a short note on :
i) JTabbedPane
ii) JScrollPane
iii) JList
iv) JComboBox. (08 Marks)

PART – B

- 5 a. Explain JDBC process in detail. (12 Marks)
b. Write a short notes on :
i) J2EE
ii) J2SE
iii) ResultSet
iv) ResultSetMetaData. (08 Marks)
- 6 a. Explain the difference between the applet and servlet. (04 Marks)
b. With a diagram, explain servlet life cycle. (08 Marks)
c. With a program, explain handling HTTP requests and responses. (08 Marks)
- 7 a. Why we use JSP? Explain JSP tags. (08 Marks)
b. Explain Apache Tomcat with example program. (06 Marks)
c. Write a short notes on :
i) Session and cookies in JSP
ii) RMI. (06 Marks)
- 8 a. What is EJB? Explain three types of EJB that are suited to different purposes. (07 Marks)
b. Explain session beans with an example program. (05 Marks)
c. What are JAR file? Explain the benefits of JAR file format. (08 Marks)

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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.