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13MCA42

Fourth Semester MCA Degree Examination, June/July 2019
Advanced Java Programming

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. Explain the importance of classes and packages used in each step of creation of servlet with code example.   **(10 Marks)**
    b. Explain four different ways in which a session can be tracked with suitable examples.
                                                                                 (10 Marks)

2   a. Explain different ways in which you can invoke java code from jsp.   **(10 Marks)**
    b. Explain five different kinds of main tags used in jsp. Explain with code example.   **(10 Marks)**

3   a. Explain important action tags needed while bringing in a java bean into jsp and using it.
                                                                                 (10 Marks)
    b. Write a program to create a jsp page that accepts name and roll number and stores in bean and finally displays in jsp.   **(10 Marks)**

4   a. Explain different built-in annotations and its uses.   **(10 Marks)**
    b. Explain at least eight core java API packages and its uses.   **(10 Marks)**

5   a. What is a java bean? Explain its advantages.   **(10 Marks)**
    b. Write a note on atleast five each interfaces and classes in java bean API package. **(10 Marks)**

6   a. Explain important steps needed to create database connection using JDBC process data in detail.   **(10 Marks)**
    b. Explain different basic and advanced JDBC data types using code example.   **(10 Marks)**

7   a. What are the main important features that a good software should possess. Explain in detail.
                                                                                 (10 Marks)
    b. Explain in detail, the three ways in which a given responsibility can be broken down.
                                                                                 (10 Marks)

8   Write a short note on different server side components:
    a. Stateless session bean
    b. Stateful session bean
    c. Singleton session bean
    d. Message driven bean.   **(20 Marks)**

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