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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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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.

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