Paper / Subject Code: 53604 / Advanced Java

27/11/2018

(2½ hours)

Total Marks: 75

N. B.: (1) **All** questions are **compulsory**.
(2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
(3) Answers to the **same question** must be **written together**.
(4) Numbers to the **right** indicate **marks**.
(5) Draw **neat labeled diagrams** wherever **necessary**.
(6) Use of **Non-programmable** calculators is **allowed**.

1. **Attempt _any two_ of the following:** 10
a. Explain adapter classes and inner classes.
b. Explain the border layout used in java with the help of program.
c. How does AWT create Check boxes? Explain with syntax and code specification.
d. Write a program demonstrating the use of ItemListener.

2. **Attempt _any two_ of the following:** 10
a. Explain the JMenuBar, JMenuItem and JMenu component's usage with illustration
b. Explain the "JProgressBar" component's usage with illustration.
c. Explain Root Pane, Glass Pane, Layered Pane, Content Pane and Desktop Pane.
d. What is the difference between AWT and Swing?

3. **Attempt _any two_ of the following:** 10
a. What are servlets? What are the advantages of servlet over CGI?
b. Write short note on Servlet & ServletConfig by explaining its methods.
c. Explain GenericServlet with its constructors and methods.
d. Explain the ServletRequest interface of servlet API.

4. **Attempt _any two_ of the following:** 10
a. List the Implicit objects of JSP. Explain any 4 of them in detail.
b. Write JSP Code that will display factorial of numbers from 1 to 20.
c. What is statement in JDBC? Explain the various kinds of statements that can be created in JDBC.
d. What is JDBC driver? Explain the types of JDBC drivers.

5. **Attempt _any two_ of the following:** 10
a. Explain in details phases of JSF Life cycle.
b. Explain the use and structure of faces-config.xml file.
c. Explain MVC architecture.
d. What are EJB? Explain its benefits.

6. **Attempt _any two_ of the following:** 10
a. What is hibernate? Explain its architecture.
b. Explain interceptors in struts.
c. Explain in detail core components of Struts framework.
d. Explain Filter dispatcher and any two Actions components used by struts.

7. **Attempt _any three_ of the following:**   15
a. Explain the Event Delegation Model.
b. Explain the use of Editor Panes in java swings.
c. Explain Servlet life cycle with help of suitable diagram.
d. Write a JDBC program that inserts values in database. [table Name : Employee, Fileds : Empid, Name, Dept, Designation]
e. List and explain elements of JSF.
f. What is OGNL in struts? Explain the Execution Flow of OGNL.

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