

Adv. Java

Q.P. Code :01757

[Time: 2½ Hours]

[Marks:75]

Please check whether you have got the right question paper.

- 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** calculator is **allowed**.

Q.1 Attempt any two of the following: (10)

- a. What do you understand by anonymous inner class? Explain with the help of a suitable example.
- b. Explain the various Layout Managers available in AWT
- c. How does AWT create Radio Buttons? Explain with syntax and code specification.
- d. Write a program demonstrating the use of ItemListener.

Q.2 Attempt any two of the following: (10)

- a. Explain Root Pane, Glass Pane, Layered Pane, Content Pane and Desktop Pane.
- b. What is the purpose of JComboBox? Explain with the help of an example.
- c. Write a java swing program that creates a hierarchical tree data structure.
- d. What is the difference between AWT and Swing?

Q.3 Attempt any two of the following: (10)

- a. What is CGI? What are its disadvantages?
- b. Write short note on Servlet and ServletConfig by explaining its methods and Constructors.
- c. Write a servlet program that will read a string from user. If the string is 'University of Mumbai' then greet the user otherwise display error message.
- d. Explain the following methods of ServletRequest interface of servlet API
 1. getParameter
 2. getServerName
 3. setAttribute
 4. getAttributeNames
 5. getParameterValue

Q.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 scrollable ResultSet in JDBC? Explain.
- d. Explain the preparedStatement with suitable example.

Q.5 Attempt any two of the following: (10)

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- a. Explain in details phases of JSF Life cycle.
- b. Explain with suitable example <navigation-rule> element of faces-config.xml file of JSF.
- c. List and explain different types of Enterprise Beans.
- d. Explain the benefits of EJB.

Q.6 **Attempt any two of the following:**

- a. What is the importance of hibernate mapping file? Explain with suitable example.
- b. Write a short note on Interceptors in struts.
- c. Explain in detail about core components of Struts framework.
- d. Explain Filter dispatcher and any two Actions components used by struts.

(10)

Q.7 **Attempt any three of the following:**

- a. Explain the Event Delegation Model.
- b. Write a java program using Split pane to demonstrate that a screen divided in two parts. One part contains the examination seat number of student. When user selects the exam seat number, mark sheet of the student should get displayed in another pane.
- c. Explain Servlet life cycle with help of suitable diagram.
- d. Write short note on JDBC Driver. Explain its types and advantages.
- e. List and explain elements of JSF.
- f. What is OGNL in struts? State and explain the Execution Flow of Value Stack.

(15)