TCS-505   1062

Odd Semester Examination 2018-19

B.Tech. (CSE) (SEMESTER-V)

ADVANCED JAVA PROGRAMMING

Time: 03:00 Hours   Max Marks :100

Section A

Note: Attempt **any four**. All question carry equal marks.   [4×5=20]

Q1.   Define the following terms:

(a)   Listener

(b)   Filter

(c)   ServletConfig

(d)   ThreadSafe

(e)   JSP Action Tag

Section B

Note: Attempt **any four**. All question carry equal marks.   [4×5 =20]

1.   Define RequestDispatcher with suitable example.

2.   What do you mean by CallableStatement. Explain using suitable example.

3.   What is JDBC? Explain the use of different types of Statement with their advantages and disadvantages.

4.   Differentiate between Servlet, Generic Servlet and Http Servlet?

5.   Explain the Servlet life Cycle with all the function used for various phases.

Section C

Note: Attempt **any four**. All question carry equal marks.   [4×5=20]

1.   What is custom tag in JSP?

2.   Write the JSP code using Core JSTL and Sql JSTL to select the data from a table and print in a tabular format on a web page.

3.   Write the code for various files used for the following custom tag used in index.jsp file. This custom tag is used to convert decimal number into Hexadecimal number.

      <ej:d2hex number="45"></ej: d2hex >

4.   Explain MVC architecture in detail. Write its major advantages and disadvantages.

5.   Explain with reason why HttpServlet are preferred over GenericServlet.

Section D

Note: Attempt **any two**. All question carry equal marks.   [2×10=20]

1.   We use servlet-config.xml/struts.xml in a struts project but our web container only knows to read web.xml. How do we map our request in such projects? Do we use any special container or some special classes? Explain with an example.

2.   Create a webpage for online recharge site using suitable J2EE technologies. The site will have some promo codes in a database table with validity date. The user will apply a promo code but the site should check the validity date of the promo code and apply the discount if valid otherwise give error message is promo code is expired.

3.   Implementing the following scenerios using suitable J2EE technologies : 'Create a webpage for online recharge site. The site will have some promo codes in a database table with validity date. The user will apply a promo code but the site should check the validity date of the promo code and apply the discount if valid otherwise give error message is promo code is expired"
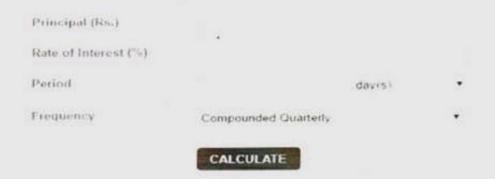
Section E

Note: Attempt **any two**. All question carry equal marks. [2×10=20]

1. Write the code in HTML/JSP/Servlet for the following Fixed Deposit (FD) Calculator. Consider that the interest is compounded quarterly only and the period may be in Days, Months or Years. The calculated amount will be shown on other page. (Formula to calculate compound interest should be known to the student).

Principal (Rs.)

Rate of Interest (%)

Period   day(s) ▼

Frequency   Compounded Quarterly ▼

CALCULATE

2. Implementing the following scenerios using suitable J2EE technologies : "You need to create a bank login page which allow the user if correct password is provided otherwise it will block the user after three consecutive wrong passwords".

3. Write the servlet code to implement a counter to count the number of time a web page is refreshed and the value of the counter should print in decimal as well as in binary format. (As shown below).

Counter in Decimal	Counter in Binary
5	00000101

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