



DHARMSINH DESAI UNIVERSITY, NADIAD
FACULTY OF TECHNOLOGY
B.TECH – SEMESTER – VI, IT
SUBJECT: [IT 617] ADVANCED JAVA TECHNOLOGY

Examination : Second Sessional
Date : 17/02/2017
Time : 12:00 to 01:15 PM

Seat No. :
Day : Saturday
Max. Marks : 36

INSTRUCTIONS:

1. Figures to the right indicate maximum marks for that question.
2. The symbols used carry their usual meanings.
3. Assume suitable data, if required & mention them clearly.
4. Draw neat sketches wherever necessary.

- Q.1 **Do as directed.** [12]
- (a) Explain the code snippet below: [2]

```
<jsp:useBean id="myBean" type="com.Class1" class="com.Class2">  
    <jsp:setProperty name="myBean" property="*" />  
</jsp:useBean>
```
- (b) Explain jsp lifecycle in detail with its api. [2]
- (c) List out advantages of MVC Model 2 Architecture? [2]
- (d) Select the appropriate option for the following questions. [6]
1. An RMI Server is responsible for ____

(a) Creating an instance of the remote Obj.
(b) Exporting the remote object
(c) Binding the instance of the remote object to the RMI registry
(d) All mentioned above

3. In RMI which layer defines and supports the invocation semantics of the RMI connection and this layer maintains the session during the method call?
(a) The Stub & Skeleton Layer
(b) The Application Layer
(c) The Remote Reference Layer
(d) The Transport Layer

5. Which of the following is not a valid implicit object in EL?
(a) header
(b) headerValues
(c) params
(d) paramValues

2. RMI uses which protocol on top of TCP/IP
(a) Java Remote Method Protocol (JRMP)
(b) Internet Inter-ORB Protocol (IIOP)
(c) Jinni Extensible Remote Invocation (JERI)
(d) All mentioned above

4. Which will be output of following code when the query string is `firstname=John&lastname=Doe`?
(a) John Doe
(b) John Doe Doe
(c) John null Doe
(d) John null doe doe

6. Which Custom tag is used to dynamically add the contents from the provided URL to the current page at request time?
(a) <c:content>
(b) <c:include>
(c) <c:import>
(d) None of the above
- Q.2 Attempt **Any Two** from the following questions. [12]
- (a) Create the JavaBean named ResultBean with attributes like mark1, mark2, mark3, mark4 and mark5 of five subjects. Create jsp page that requests user for five subject marks. The JSP page should create ResultBean instance and set values to the bean instance. The JSP page will get marks from ResultBean. It will calculate and display total marks and percentage in some another jsp page. Write a program with the use of <jsp:useBean> standard action. [6]
- (b) What is JSP JSTL? Write a code using JSTL sql tag to search students data from student's ID, and display searched data from database, if searched ID not found than, application should handle it using exception handling mechanism of page directive. [6]
- (c) 1. Explain JSP implicit objects. [2]
2. Write a JSP code, with the use of JSTL core tag, in which you have to take a number and user name from a user. And check the following condition. [4]
1. Print given number is even or not, and display result on the same jsp page.
- Q.3 Attempt **ALL** from the following questions. [12]
- (a) Create a RMI based client-server application. The server provides functionality of interest calculator to client through RMI mechanism. The client sends principle, time and rate of interest to server. Server calculates the interest amount and the total amount to be paid to clear the complete debt. Give definition of interface, implementation class, server class, and client class. [8]
- (b) Compare different approaches of session tracking. Write Java code to send cookies from servlet to client browser. How session information is handled if cookie is disable in client browser? [4]
- OR**
- Q.3 Attempt **ALL** from the following questions. [12]
- (a) List-out the situations where JNI can be used? With an example, explain all the steps need to be executed, while working on native methods? [8]
- (b) Differentiate between two approaches of Response Redirection: Response.sendRedirect() and RequestDispatcher.forward(). [4]