

**GANPAT UNIVERSITY****B. Tech. Semester: V Computer Engineering/Information Technology****CBCS Regular Examination November - December 2014****2CE505/2IT505: Advanced Java****Time: 3 Hours****Total Marks: 70**

- Instruction:**
1. Attempt all questions.
  2. Figures to the right indicate full marks.
  3. Each section should be written in a separate answer book.

**SECTION - I**

- Que.1** [A] What is J2EE? Explain enterprise architecture and its types. [6]  
 [B] Explain JDBC driver types with advantages and disadvantages. [6]

**OR**

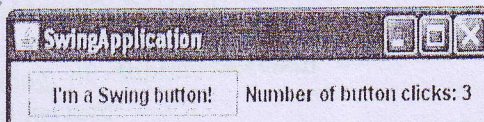
- Que.1** [A] Explain application deployment process in detail. [6]  
 [B] Explain the use of the PreparedStatement and CallableStatement objects of the JDBC with an appropriate example. [6]

- Que.2** [A] How applets differ from applications? Write an applet that sets the background color to cyan and draws a circle of radius 50 pixels centered in the middle of the applet. The dimensions of the applet should be 120\*120 pixels. Fill the circle with a magenta color. [5]  
 [B] Explain MVC in Java Swing. Describe pluggable look and feel feature of Java Swing. [6]

**OR**

- Que.2** [A] Develop an applet that receives three numeric values as parameters from HTML file and then displays the largest of the three on the screen. Write HTML file for the same. [5]  
 [B] What is Layout Manager in Java Swing? Explain GridLayout and FlowLayout with an example. [6]

- Que.3** [A] How to implement an Event handler in Swing? Write a Swing program to implement following JFrame which has a JButton and a JLabel. JLabel displays the number of times the button is clicked. When user clicks on JButton, JLabel should be updated. [6]



- [B] Write a Java Program to insert, update, delete and select student's details like Roll\_No, Name, Address, Age, Email\_Id from Student table using JDBC. Use CreateStatement for select query and PreparedStatement for insert query. (Assume appropriate condition for update and delete query) [6]



SECTION – II

Que.4 [A] What is servlet collaboration? Explain forward() and include() of RequestDispatcher with an appropriate example. [6]

[B] What is JSP? Explain life cycle of JSP. [6]

OR

Que.4 [A] What are JSP directives? Explain different types of directives with example. [6]

[B] What is EJB? How is it different from Javabeans? Briefly explain different types of enterprise beans. [6]

Que.5 [A] Consider Book table with fields BookId, BookName, AuthorName, Publication, and Edition in database. Write a program using JSP and JDBC for search book functionality. Design one page "index.jsp" containing textbox (for entering AuthorName) and a submit button. When user clicks on button, he should be redirected to "search.jsp" where search result from database (list of books) is displayed. [5]

[B] Describe Cookies and URL Rewriting techniques with advantages and disadvantages. Create an HTML file "AddCookies.html" which contains four text boxes. When user enters the values in these text boxes and press the submit button, the values will be sent to "AddCookies.java" servlet and get saved in cookies. [6]

OR

Que.5 [A] Write a servlet program to insert and select Customer details using JDBC like customer\_id, customer\_name, address, and email from Customer table. [5]

[B] What is Java Bean? Describe the need and characteristics of Java Bean. Design a StudentBean class with Student details like firstname, lastname and age. Set the properties of StudentBean using <jsp:setProperty> tag. Display the Student details in JSP page using <jsp:getProperty> tag. [6]

Que.6 [A] Create an interface called Items which contains two methods equal()(to check whether two numbers are equal or not) and display()(to display two numbers). Create a class Client that implements the Items interface. Client has two instance variables a, b of type integer and constructor to initialize them. Create an object of Client class and test the methods. [3]

[B] Explain EJB architecture. [3]

[C] What is JSTL? Explain any two tags of JSTL core tag library. [3]

[D] State the scenarios where one can use getParameter() , getParameterNames() and getParameterValues() . [3]

END OF PAPER