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BE Degree Examination November 2016

Fifth Semester

Computer Science and Engineering

14CSE03 – ADVANCED JAVA PROGRAMMING

(Regulations 2014)

Time: Three hours

Maximum: 100 marks

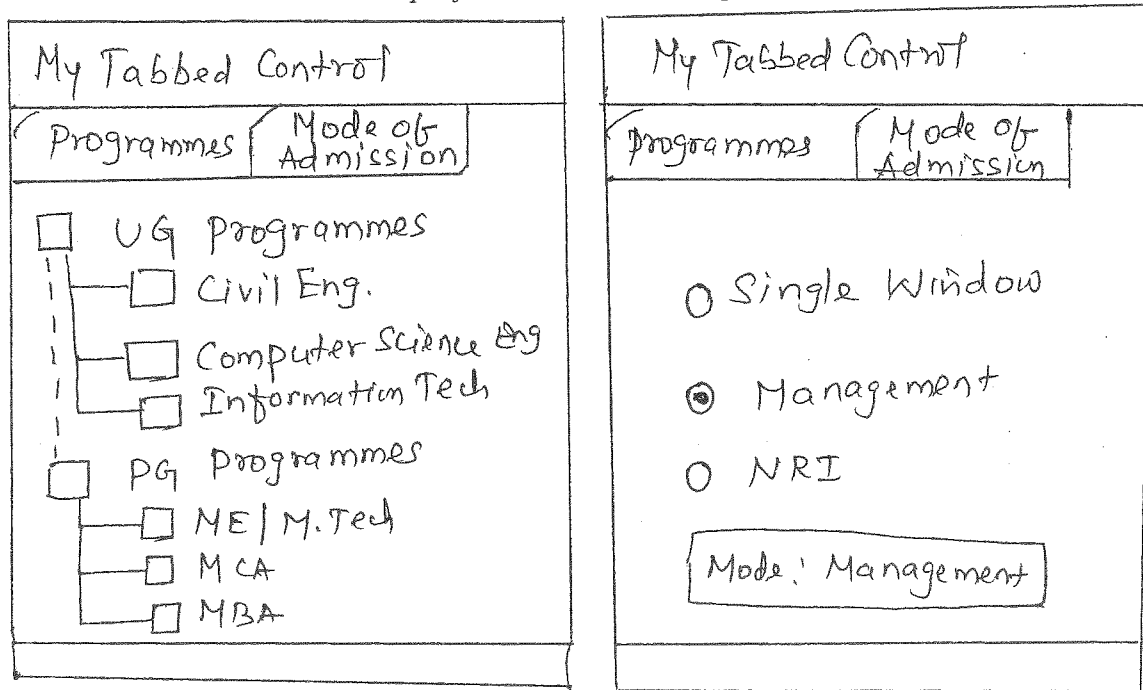
Answer all Questions

Part – A ($10 \times 2 = 20$ marks)

- Enumerate the two key features of swing.
- State the purpose of JComboBox class and mention its constructor.
- How will you add a tooltip to a menu item? Give an example.
- Identify the component that can serve as both an alternative and as an adjunct to a menu. Give its constructor.
- Specify the significance of factory methods. Give the syntax of one factory method available in InetAddress class.
- Draw the architecture of RMI.
- When a HTTP client connects to a HTTP server and makes an HTTP request, the request can be either "GET" or "POST" method. How do you differentiate these two methods?
- Specify the two parameters that are passed to doGet () / doPost () methods of HTTP servlet.
- Name the driver software which enables the java servlet / JSP program to connect to a database tool MySQL / ms Access / oracle.
- Write a JSP program to display "Helloworld" message.

Part – B ($5 \times 13 = 65$ marks)

- Create a swing Tabbed pane control with two tabs. The first tab should contain (13) the various programmes offered by Kongu Engineering College in various categories as shown in figure. When you choose any programme the complete path is to be displayed in label component of the Applet window. The second tab should contain mode of admission and when you choose a mode, the chosen mode of admission is to be displayed in the label component.



(OR)

- b. Illustrate the four different types of buttons supported by swing. List the various constructors and methods supported by each type of button class. (13)

12. a. i) Enumerate the steps required to build a table in swing application. (5)
ii) Write a java program to display the following table. (8)

S.No	Course Code	Course Name	Marks
1	13CS101	C Programming	85
2	13CS102	Data Structures	63
3	13CS103	Operating System	78

(OR)

- b. Design a swing GUI to read the movie details, such as name of the movie, name of the actor, type of the movie (Action, comedy etc) and year of release. Choose the appropriate swing component to design the GUI. Add a button with a caption "Insert". When the user presses the "Insert" button, the movie details should be inserted in to mySQL / oracle / MS Access database. Write the necessary java code for database connectivity and inserting details in to the database. (13)

13. a. i) Write a java program to print the IP addresses and domain names of the websites www.yahoo.com and www.google.com. (8)
ii) State the purpose of URL class and specify the different forms of its constructor. (5)

(OR)

- b. Define Datagram. Demonstrate how java implements datagrams on top of the UDP protocol by using DatagramPacket and DatagramSocket classes. List the constructors and methods supported by these two classes. (13)

14. a. i) What is servlet? Mention the two different types of servlet. (3)
ii) Demonstrate the life cycle of a servlet with a suitable servlet program. (10)

(OR)

- b. Design a HTML form to read the student details such as rollno, name, date of birth, gender and marks scored in 3 courses. Write a servlet program to read the HTML form data and insert in to a database of your choice. (13)

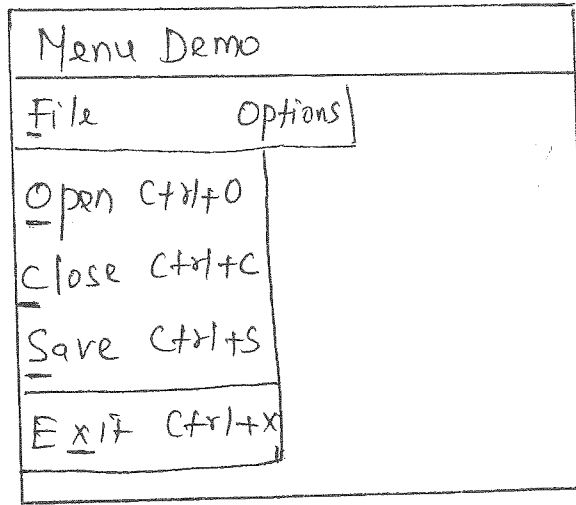
15. a. Why session tracking is important? Demonstrate any two session tracking techniques with suitable java code. (13)

(OR)

- b. i) Write a JSP program to multiply two numbers. (3)
ii) Develop a simple web application for the registration of your resume using HTML servlet and JDBC. (10)

Part – C (1 × 15 = 15 marks)

16. a. i) Enumerate the core swing menu classes along with its purpose. (5)
- ii) Create a swing application to display the following menu and menu items. (10)
Add mnemonics and Accelerators to menu items.



(OR)

- b. Outline the working principle of RMI. Write a RMI program to perform addition, subtraction and multiplication of two integers. Mention the necessary steps required to compile and execute RMI application. (15)