B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APR / MAY 2014

COMPUTER SCIENCE AND ENGINEERING

Fourth Semester

CS8402 Java and Internet Programming

(Regulation 2012)

Time : 3 Hours   Answer ALL Questions   Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. What are the different types of data defined in Java? Give their range.

2. What is method overriding? Give example.

3. Give the features of Web 3.0.

4. Write about the classes and methods that are available in java to process the URLs.

5. What is Z-index?

6. Is XML schema are useful in support of data types? Justify your answer.

7. How to call a stored procedure from JDBC?

8. List some of the methods in Graphics class. Also indicate how to include an Applet in a web page?

9. What are the environment variables that are stored and processed in PHP?

10. Present the usefulness of cookies in terms of web application development.

Part – B (5 x 16 = 80 marks)

11. (i.) Discuss about how exceptions are handled in Java and also write a java program that raises an exception named InsufficientFundsException whenever a customer of a bank tries to withdraw an amount higher than the available amount.   (8)

(ii) Describe how Multithreading can be achieved in Java with a neat example   (8)

12. a) i) Explain the steps involved when establishing a TCP connection using sockets and the Java classes and methods involved in it. Also, write a java program for a client to connect with a server, sends a message "Welcome to Java Programming" and waits for the response from the server. (8+8)

OR

b) i) Describe the basic principles in Remote method invocation and build a java RMI program that has three methods that performs displaying a message, finds the factorial of a given number and swaps two integer (8+8)

13. a) i) Discuss about the unique features of CSS and DHTML using the program to display the details of cricket players team wise and their yearly achievements (8)
ii) Express the concepts of XML with an example and discuss about the advantages and limitations of DTD. (8)

OR

b) i) With an example program, explain the working of AJAX, the events associated with it. (8)
ii) Using swings, design a basic calculator application that performs arithmetic and logical operations. Include necessary events and methods and explain. (8)

14. a) i) How to declare variables, handle arrays and strings in PHP (8)
ii) By Considering the student database with necessary tables, write a PHP code to retrieve the marks of a student, compute the grades of each subject and display it in a page. (8)

OR

b) i) Present about the directives, implicit objects available in JSP (8)
ii) How session tracking is done in JSP? write a sample program. (8)

15. a) Develop a online shopping cart system which retrieves and displays list of products from the database, allows the users to select a product, uses customers credit card information for the purchase and generates reports. Validate form elements wherever necessary. (Use DHTML, Javascript, PHP appropriately) (16)

OR

b) Develop an online ticket booking system which can access and validate the details of the passengers from the database, allows reservation/cancellation of tickets, provides concessions and calculates amount to be paid. (Use DHTML, Javascript, JSP appropriately) (16)

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