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YMCA UNIVERSITY OF SCIENCE AND TECHNOLOGY
B.TECH.(IT) 7th Sem EXAMINATION (Under CBS)
Advance Client Server Technology (IT- 403)

Time:3 hrs

MAX MARKS : 60

Note: Part I is compulsory. Attempt any four questions from Part II.

PART I

- QNo1 (a) What is the role of JDBC DriverManager class?
(b) What is the basic difference between the functioning of combo boxes and Lists?
(c) What gives Java its 'write once and run anywhere' nature?
(d) Can you make a constructor final? Justify.
(e) How does get differs from post request?
(f) Under what conditions is an object's finalize() method invoked by the garbage collector?
(g) What are the key features of the EJB technology?
(h) What is the GenericServlet class?
(i) List various steps to write the RMI program
(j) Write a java code to extract protocol, host and port of a url. (2*10)

PART II

QNo2(a) What are Applets? How are they different from Java Programs. Create an applet that satisfies

the following requirements:

- a) Dimensions (width by height) should be 400 by 600.
- b) Uses at least three kinds of visible graphic drawing elements.
- c) Uses at least three colors

(5)

(b) Write a program to design an interface with a method reversal. This method takes a string as input and returns the reversed string. Add this interface to a package. Create a class StringRev and implement this method. (5)

QNo3 What are servlets? List their various benefits. Explain the following methods of ServletRequest

interface of servlet API in detail

(10)

- a. getParameter
- b. getServerName
- c. setAttribute
- d. getattributeNames
- e. getParameterValues

QNo4 (a) Write a program to implement the TIME class in java that has addition(), subtraction(), Getdata() and Putdata() functions to perform Addition of two Time objects, Subtraction of tw TIME objects, read TIME object from user and Display TIME

object respectively. Also define therequired default and parametric constructor for the same. (7)

TIME

Int Hrs, Mins
Time()
Time(int h, int m)
Getdata(int h,int m)
Putdata()
Add(TIME t)
Sub(TIME t)

(b) Explain the statement written below:

`System.out.println("hello".toUpperCase().concat("there"));` (3)

QNo 5(a) Write a program for user defined exception that checks the internal and external marks; if the internal marks are greater than 40 it raises the exception and displays the message "Internal Marks exceeds"; if external marks are greater than 60 it raises the exception and displays the message "External Marks exceeds". (7)

(b) "Static member functions can access only static part of the class". Justify the statement. (3)

QNo6 Differentiate between Statement , CallableStatement and PreparedStatement with the help of a suitable statement. Write a program to create a connection to access database through a java application and display all data rows from a table of the database. Assume the suitable database. (10)

QNo7 Write short notes on

- (a) Skeleton and stub
- (b) Sockets
- (c) Session beans
- (d) Packages

(10)