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BCS13

Roll No. ☐☐☐☐☐☐☐☐☐☐☐

B. Tech.
(SEM I) ODD SEMESTER
MAJOR EXAMINATION 2015 - 2016

INTERNET AND JAVA PROGRAMMING

Time: 3 Hrs.   Max. Marks: 40
Note: Answer all questions.

Q.1   Attempt any Three parts of the following. Q. 1(a) is compulsory.
  (a). Explain the purpose of the following: 4
        (i) XML
        (ii) HTML
        (iii) DNS
        (iv) ISP
  (b). What is an Internet? What are web addresses? Explain the general syntax of a web   3
        address.
  (c). What are the different hardware and software requirement for video conferencing.   3
        Explain each in brief.
  (d)   Compare and contrast different technologies available for Internet access.   3

Q.2   Attempt any Three parts of the following. Q. 2(a) is compulsory.
  (a). What is default constructor? Write a Java program which computes volume of a given   4
        box using constructors.
  (b). Differentiate between process based and thread based multitasking. Give the two ways   3
        by which a thread can be created using Java. Write a short java program to
        demonstrate the creation of a new thread by extending the thread class.
  (c). What are different exception classes in Java? Explain throw, throws and finally   3
        keywords used in Java.
  (d)   What is an interface in Java? Why multiple inheritance is not directly supported by   3
        Java? Write a Java program which implements multiple inheritances using an interface.

Q.3   Attempt any Three parts of the following. Q. 3(a) is compulsory.
  (a).   i.   What are the advantages of using JDBC with Java?   4
          ii. What are the different types of statements available in JDBC? Where do we use
               these statements?
  (b). Write short notes on the following by giving their proper syntax: 3
        (i) Scroll Panes
        (ii) Toggle button
        (iii) Combo box
  (c). What are different Java AWT components? Write an event driven applet program with   3
        buttons labeled "Yes", "No", and "Undecided". Each time one is pressed, a message is
        displayed that reports which button has been pressed

(d) What is Remote Method Invocation (RMI)? Differentiate between Naming.bind and Naming.rebind method? Write a short code to invoke a remote method using Java RMI. 3

Q.4 Attempt any Three parts of the following. Q. 4(a) is compulsory.

(a). Differentiate between an applet and application in Java. Also, write an applet program to display the following output: 4

Applet Viewer : Simple Applet.class	− □ ✕

Applet

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	

Applet started

(b). How a Servlet is different from CGI program? List and explain with proper syntax about four classes available in the package javax.servlet to build a Servlet program. 3

(c). What is a Java Bean? List and explain the various classes available in java.beans package. 3

(d) Explain Introspection in context of Java Bean by writing a suitable piece of Java code. 3