Roll No. ⬜⬜⬜⬜⬜⬜⬜⬜⬜⬜

Number of Printed Pages—4   **IT–501/CS–703**

B. TECH.

FIFTH SEMESTER EXAMINATION, 2002-2003
INTRODUCTION TO WEB TECHNOLOGY

Time : Three Hours   *Total Marks : 100*

Note : (1)   Attempt ALL questions.
         (2)   All questions carry equal marks.

Attempt any TWO of the following :—   (10 x 2)

(*a*)   What do you mean by Protocol ? Give the name of those protocols which help in web and explain the working of those protocols.

(*b*)   How can we identify the object in web development strategies ? Also explain, with the help of block diagram, web development process.

(*c*)   (*i*)   How do you make an image clickable in HTML ? Give an example.

       (*ii*)   Design a Form for a new company, Interburger, that allows hambugers to be ordered via Internet. The form should include the customer's name, address, and city, as well as a choice of size (either gigantic or immense) and a choice option. The burgers are to be paid for in cash upon delivery, so no credit-card information is needed.

2.   Attempt any FOUR of the following :—   (5 x 4=20)

(*a*)   What is the need of studying the technological advances while designing a Website ? Discuss the impact of technological advances on a Web-team .

(b) What is a Form ? How are forms created for a Website ? What is the function of submit button on a form ?

(c) What is HTML ? What types of pages are created with the help of HTML ? How are these pages different from dynamic pages ? How do you make the pages dynamic ?

(d) What is e-commerce ? How do the websites help in e-commerce ? Why is the e-commerce not very successful as expected ? Discuss.

(e) How are the databases connected to the Web applications ? How are these databases managed through Web ? Explain with examples.

(f) How does a client build the communication to a Website ? What is the impact of communication breakdowns on a Website ? How can this be prevented ?

3. Attempt any TWO of the following :—   (10 x 2)

(a) (i) Why is Java known as platform independent language?   2

(ii) What is a Byte Code ? How are pointers used in Java?   3

(iii) Write a Java program to find out the factorial of any positive integer input by the user. 5

(b) (i) What is Synchronization ? Why do we need it ?   2

(ii) Write a program using —
    1. default constructor.
    2. argument constructor.
    3. copy constructor.   6

(*iii*) Write a text to create a HTML file which can execute an applet name "myapplet".. 2

(*c*) (*i*) Java does not support destructor. Discuss. 2

(*ii*) What do you mean by Thread States? Name the possible states of thread and explain them in short. 4

(*iii*) What will happen, when you compile and run the following program :— 2

public class myclass

```
{
public static void main (String args)
    {
System.out.println ("hello world");
    }
}
```

(*iv*) What is the difference between print and printin statements? Explain with an example. Write a Java program to read the contents of a text file and print it out on the screen. 2

4. Attempt any TWO of the following :— (10 x 2)

(*a*) Give the difference between local applet and remote applet. How are the Java applets executed ? Develop an applet that receives three numeric values from user for principal amount, rate and year to calculate simple interest and hence display it on screen. Write a HTML page and test the applet.

(*b*) (*i*) What do you mean by AWT? Explain the working of AWT.

(*ii*) What is the relationship between Java and HTML?

(*c*) (*i*) What do you mean by Garbage collection? How is it done in Java?

(*ii*) What do you mean by Exception? Also write a program to handle exception in Java.

5. Attempt any TWO of the following :— (10 x 2=20)

(*a*) (*i*) Write the steps that you must follow to create a new user defined bean. 2

(*ii*) Explain any two methods available in servlet package. 3

(*iii*) What is the differnce between AWT and Swing ? 2

(*iv*) Write a program to display the name of the Java files in C-drive. 3

(*b*) (*i*) Explain brief functioning of upper layer E-mail and their applications. 4

(*ii*) Write down the C++ features that are not supported by Java. 2

(*iii*) Write a short note on image based menu. 4

(*c*) (*i*) What are the statements available in java.sql ? 3

(*ii*) Write a short note on Lavatron applet. 3

(*iii*) What is the use of super keyword ? 1

(*iv*) Write a Java program that will print the subscript of an array and the corresponding elements of the array. 3

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