Printed Pages : 2   EIT-401

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0113   Roll No. [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

B.Tech.
(SEMESTER-IV) THEORY EXAMINATION, 2011-12
WEB TECHNOLOGY

Time : 3 Hours]   *[Total Marks : 100*

Note :   Attempt **all** Sections.

Section – A

1.   Attempt **all** parts of this Question.   10 × 2 = 20

   (a)   Differentiate between Web browser and Web server.
   (b)   What are Cookies ?
   (c)   Discuss how frames play a big role in advertising on web.
   (d)   What is meant by a hyperlink ? How it is used with image ?
   (e)   How run time polymorphism is achieved in Java ?
   (f)   How do we manage a database through web ?
   (g)   Is COM same as DCOM ? Comment on it.
   (h)   Explain the term Document Type Definition (DTD) with the help of suitable examples.
   (i)   Briefly discuss the main steps involved in the Creative and Content Planning process.
   (j)   Define Quality Assurance and discuss its role.

Section – B

2.   Attempt any **three** parts of this Section :   3 × 10 = 30

   (a)   What are the various characteristics of a web team ? What do you mean by Target Users ?
   (b)   Make a difference table for Static Web Page, Dynamic Web Page and Active Web Pages.
   (c)   What is EJB ? Differentiate Java Bean and EJB.
   (d)   What is a stream ? How is the concept of streams used in Java ? What are input and output streams ?
   (e)   Explain the Struts framework with the help of suitable examples.

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Section – C

Attempt **all** questions of this Section.   **5 × 10 = 50**

3.   Attempt any **two** parts of the following :

   (a) What are protocols ? Describe the various layers with functions and protocol in TCP/IP and OSI. Differentiate between OSI model and TCP/IP.

   (b) Discuss the various Web Project Developments Phases in detail.

   (c) Explain the working of following with Architecture, Functions, Advantages and Disadvantages –

      (i) Router

      (ii) Gateways

4.   Attempt any **one** part of the following :

   (a) What is XML ? Create an XML document of 10 students of first Year. Add their roll numbers, marks obtained in 5 subjects, total marks and percentage. Save this XML document at the server, write a program that accepts student's roll number as input and returns the students marks, total and percentage by taking the student's information for the XML document.

   (b) What do you mean by CSS ? Write a CSS rule that makes all the text 2.5 times larger than the base font of the system.

5.   Attempt any **two** parts of the following :

   (a) What is a java bean and what are the advantages of java beans ? Why is it necessary to understand JAR files before developing a bean ? Also explain the various commands for the same.

   (b) Explain the various Security Issues for Web Servers.

   (c) What is Java Servlet and Java Server Page ? Explain the life cycle of Servlet. Name the method of Servlet Request Class.

6.   Attempt any **one** part of the following :

   (a) What is JSP ? What are the advantages of JSP over CGI ? JSP provide better performance, prove this statement. How can we enable and disable session in JSP ?

   (b) Write short notes on the following :

      (i) Tomcat Server

      (ii) Error Handling and Debugging

7.   Describe any **two** parts of the following :

   (a) Accessing a Database from a JSP page.

   (b) Developing Java Beans in a JSP page.

   (c) Application Specific Database Action