

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

PAPER ID : 0113

Roll No.

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

Section – B

2. Attempt any three parts of this Section : 3 × 10 = 30
- What are the various characteristics of a web team ? What do you mean by Target Users ?
  - Make a difference table for Static Web Page, Dynamic Web Page and Active Web Pages.
  - What is EJB ? Differentiate Java Bean and EJB.
  - What is a stream ? How is the concept of streams used in Java ? What are input and output streams ?
  - Explain the Struts framework with the help of suitable examples.

### 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