	(Following Paper ID and I	oll No. to be filled in your Answer Book)	
<i>y</i> .	PAPER (D: 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.

 $10 \times 2 = 20$ 

- (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:

 $3\times10=30$ 

- (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.

Attempt all questions of this Section.

- 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