

Dec.-22-0312

CS-706 (Web Technology)

B.Tech. 7th (CBCS)

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

**Note :** This question paper carries five sections. Attempt any five questions selecting at least one question each from section A, B, C & D. Section E is compulsory.

#### SECTION - A

1. (a) Why is Information Architecture important to web design? Also discuss the example to create a well-designed I.A. (5)
- (b) Discuss in detail navigation structure of a website. Why is navigation important on a website? Also explaining how to improve website navigation? (5)
2. (a) How do you search a website effectively on Google? What is the main purpose of web index? How do you create a website mockup? (5)
- (b) What five activities are parts of the conceptual design process? Why is the conceptual design phase important? How are sketches used in the design process? (5)

#### SECTION - B

3. (a) What is the difference between a block-level element and an inline element? How does HTML and CSS work together? (5)
- (b) How to handle events with DHTML? Name some new features which were not present in HTML but are added to HTML5. (5)

4. (a) Write an HTML code to form a table to show the below values in a tabular form with heading as Roll No., Student name, Subject Name, and values as
  - (i) Ram, Physics
  - (ii) Shyam, Math
  - (iii) Murli, Chemistry
- (b) Why do you think the addition of drag-and-drop functionality in HTML is important? How will you make an image draggable? What type of audio files can be played using HTML? (5)

#### SECTION - C

5. (a) What are the steps involved in reading data from a form using JSP? List down the major differences between the forward and send Redirect. (5)
- (b) Explain the steps for creating custom tags in JSP. What are the major difference between JSP Custom Tags and Java Beans? (5)
6. (a) What are the JSP lifecycle phases? How can we avoid direct access of JSP pages from client browser? How are JSP(Java Server Pages) better than ASP(Active Server Pages)? (5)
- (b) Write an XML document that marks up the following data: All these must be rendered. Use attributes to make the data more informative.

| Emp ID | Name    | City       |
|--------|---------|------------|
| E001   | AVNI    | DELHI      |
| E002   | SHOBHIT | CHANDIGARH |
| E003   | HAMZA   | LUCKNOW    |
| E004   | MEHESH  | PUNE       |

(5)

**SECTION - D**

7. (a) What are the popular Content Management Systems (CMS) in PHP? Which programming language does PHP resemble to? (5)
- (b) Explain some of the PHP string functions? What are the methods to submit form in PHP? (5)
8. (a) How to read a file, write in a file, upload a file, download a file and delete a file in PHP? (5)
- (b) What are the tables in MySQL? Explain the types. What are the different ways to join tables in MySQL? (5)

**SECTION - E**

9. Attempt all questions.
- (a) How do architects evaluate or design a site? What is the future of IA in Web design?
- (b) Why is website structuring important?
- (c) Why is technical sketching in engineering as known as freehand sketching?
- (d) What is the use of HTML in web-development?
- (e) Explain the difference between ServletContext and PageContext.
- (f) Explain with a help of an example, how root elements are placed in a XML document?
- (g) What are Scriptlet, Expression and Declaration in JSP?
- (h) Whether graphics can be used in XML? If so, How?
- (i) What is Cookies? How to create cookies in PHP?
- (j) Write a simple example for the Clone() Method.
- (10×2=20)