



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Fifth Semester, B.E. - Computer Science and Engineering

Semester End Examination; Dec - 2017/Jan - 2018

Web Technologies

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

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|---|----|--|----|
| 1 | a. | Explain web server operation and general server characteristics. | 8 |
| | b. | Explain web programmers tools used in web programming. | 10 |
| | c. | Explain MIME type specification in request/response transaction. | 2 |
| 2 | a. | Write an XHTML document to describe an ordered list of your five favorite movies, each element of the list must have a nested list of at least two actors in your favorite movies. | 10 |
| | b. | Explain all controls that are created with the <input> tag with example which are used for text collection. | 7 |
| | c. | What tag and attribute are used to define a link? | 3 |

UNIT - II

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|---|----|---|----|
| 3 | a. | What is the purpose of external level style sheet? Compare it with the other levels. Write the format of external level style sheet. | 10 |
| | b. | Write a note on conflict resolution and explain and <div> tags. | 8 |
| | c. | What is the CSS box model used for? What are the elements that it includes? | 2 |
| 4 | a. | Explain object creation and modification in JavaScript. | 6 |
| | b. | Write a JavaScript program to check the validity of phone number and name. | 8 |
| | c. | Write XHTML document and JavaScript code to implement to count the number of names in the given array that end in either 'ie' or 'y'. | 6 |

UNIT - III

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|---|----|--|----|
| 5 | a. | Discuss the different approaches of HXTML element access in JavaScript. | 6 |
| | b. | Illustrate with JavaScript program handling of events from button element. | 8 |
| | c. | Explain event handler connection for DOM2 event model. | 6 |
| 6 | a. | Write JavaScript code which displays the message when the mouse button is pressed no matter where it is on the screen. | 6 |
| | b. | With example explain absolute and relative positioning of elements of JavaScript. | 10 |
| | c. | Explain element visibility with an example. | 4 |

UNIT - IV

- 7 a. With respect to XML schemas, explain complex types. 7
b. Explain XSLT processing with an example. 7
c. Describe XML namespaces and their definition syntax. 6
- 8 a. Describe logical internal structure of an array in PHP. 5
b. Explain any five commonly used string functions in PHP. 5
c. Create an XHTML document with PHP to display the number, square root, square, cube and quadruple. (The output should contain 10 Nos.). 10

UNIT - V

- 9 a. Explain how Rails reacts to dynamic documents? 6
b. Write short notes on directory structure of Rail. 6
c. Write short notes on layouts in Rails with example. 8
- 10 a. Explain the characteristics of Ajax. Explain traditional and Ajax browser-server interaction with diagram. 8
b. Build a Rails applications that uses Ajax to provide a personalized greeting to a user when the uses types in his or her name. 6
c. Discuss briefly functions that are used to trigger Ajax in Rail. 6

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