First Semester MCA Degree Examination, June/July 2015
Introduction to Web Technologies

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. Differentiate Web and Internet.   **(04 Marks)**
    b. Explain Web Server characteristics.   **(06 Marks)**
    c. Discuss the HTTP Request and Response Phases.   **(10 Marks)**

2   a. Explain Internet Address Structure.   **(05 Marks)**
    b. Explain how Mail – related protocol Simple Mail Transfer Protocol (SMTP) works.
                                                                                (10 Marks)
    c. Briefly explain the role of Firewall as a component of web.   **(05 Marks)**

3   a. Write an XHTML program to demonstrate the usage of definition list < dℓ >. **(05 Marks)**
    b. Explain any 5 selector forms of CSS.   **(10 Marks)**
    c. Differentiate < span > and < div > tags, with suitable example.   **(05 Marks)**

4   a. What is JavaScript? List its uses.   **(05 Marks)**
    b. Explain primitive data types in Java Script.   **(05 Marks)**
    c. How do you create and modify objects in Java Script?   **(05 Marks)**
    d. Write a Java Script function that validates 16 digit bank account numbers. **(05 Marks)**

5   a. What is Document Object Model (DOM)? Explain dom tree structures for a simple htmℓ
       document.   **(05 Marks)**
    b. Explain with suitable example how you handle events from Text Box and Password field of
       a form.   **(10 Marks)**
    c. Explain steps involved in DOM2 Event Propogation.   **(05 Marks)**

6   a. Explain with suitable example how JavaScript handles :
       i) Element visibility   ii) Stacking Images.   **(10 Marks)**
    b. Demonstrate with an example how Java Script aids Dynamic Content concept. **(10 Marks)**

7   a. What is Well formedness of a XML document?   **(05 Marks)**
    b. Explain the two user – defined XML Schema data types (Simple Type and Complex Type).
                                                                                (10 Marks)
    c. What is XSLT and explain how an XSLT document is processed.   **(05 Marks)**

8   a. What is Perl? Write a program in perl which accepts input and display output using
       keyboard and screen.   **(05 Marks)**
    b. Discuss Hashes in Perl.   **(05 Marks)**
    c. How do you reference and dereference scalar variables in Perl?   **(05 Marks)**
    d. What is the importance of CGI.pm module in Perl?   **(05 Marks)**

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