

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (2012 & Onward) (Sem.-5)

WEB TECHNOLOGIES

Subject Code : MCA-503

Paper ID : [A3161]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

- 1. SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.**
- 2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**
- 3. Use of non-programmable scientific calculator is allowed.**

SECTION-A

1.
 - a) Briefly describe the naming rules for XML elements and attributes. Explain briefly what it means to say that an XML document is well formed and valid. (10)
 - b) What is the purpose of a Document Type Description (DTD)? Identify two methods of binding a DTD to an XML Document. (10)
2.
 - a) Discuss why a XML namespace is important. How do you declare and use a name space? (10)
 - b) What is XSLT? What are its parts? How is it used with XML? (10)

SECTION-B

3.
 - a) What is AJAX? Describe, in detail, the technologies and operations used to make an Ajax application. What are the advantages and disadvantages of using Ajax as compared to synchronous requests? (5)
 - b) Given a code example using AJAX, describe the operations that will take place on the client and operations that will take place on the server. What are the advantages and disadvantages of using Ajax as compared to Adobe Flash, Java Applets, or other interactive client-side runtime environments? (15)
4. What is jQuery? What is the basic syntax of jQuery? How do you create clone of any object using jQuery? Do events are also copied when you clone any element in jQuery? (20)

SECTION-C

5. Explain various steps involved in creating web services. What are the advantages and disadvantages of web services using SOAP compared to traditional Remote Procedure Call mechanisms? (20)
6. What is JavaScript Object Notation (JSON)? What is the format for JSON? What are some advantages of JSON? What are some disadvantages? Explain with an example. (20)

SECTION-D

7. What is a Content Management System (CMS)? What is CMS's software/system development life cycle? What are the advantages and disadvantages of using a CMS? Name any TWO computer based CMS. (20)
8. Highlight the website-building features of WordPress, a Content Management System used by some of the world's top companies. (20)

SECTION-E

9. **Answer briefly :**
 - a) What is XML and why it is gaining such a momentum?
 - b) What is Document Object Model (DOM)? How is it useful?
 - c) What are XML editors?
 - d) Explain the basic functions of a web server for both static and dynamic (i.e., generated from web applications) content.
 - e) How JavaScript and jQuery are different?
 - f) What is a web service?
 - g) What is the purpose of header in a SOAP message?
 - h) Name key technologies for a web service.
 - i) What does *JSON.parse (myJSONData)* do?
 - j) What is required of a browser for Ajax to work?