CS B.Tech (IT New) SEM-7/IT-701/2013-14

9. a) Write the steps required to create the DSN

   b) Write complete HTML code to accept customer ID as input from user and validate the input using JavaScript before processing. The validation includes whether the input is blank. if not it should be exactly of 8 characters.

   c) Create a JSP page to find the factorial of a number.

   $$4 + (5 + 2) + 4$$

10. a) Illustrate the basic tags of a HTML page with an example.

    b) Design a HTML form for registration to a website for a specific service. The from should contain at least one instance of the following form elements :

       (i)   Text Box

       (ii) Check Box

       (iii) Select Box

       (iv) Radio Button

       (v)   Submit and Rest Button.   10 + 5

11. Write short notes on any *three* of the following :   3 × 5

    a) Document Object Model.

    b) ODBC and JDBC.

    c) Gateway.

    d) EJB

    e) VPN.

CS/B.Tech/(IT-New)/SEM-7/IT-701/2013-14

2013
INTERNET TECHNOLOGY

Time Allotted : 3 Hours   *Full Marks* : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following questions :   10 × 1 = 10

   i) Choose the correct HTML tag for the smallest heading.

      a) < h6 >   b) < heading small >

      c) < small heading >   d) < h1 >.

   ii) Given the IP address 14.250.31.14 and subnet mark 250.240.0.0. The calculated subnet address should be

      a) 18.9.0.14   b) 18.240.0.0

      c) 18.0.0.14   d) 18.31.0.14

   iii) The position of SSL in TCP/IP protocol suite is

      a) between transport and internet layers

      b) between data link and physical layers

      c) between application and transport layers

      d) none of these.

iv) In IPv4, what is the length of the date field for given an HLEN value of 12 and total length value of 40,000 ?

a) 39,988 b) 40,012

c) 40,048 d) 39,952.

v) Which of the following domain names would most likely use a country domain to resolve its IP address ?

a) chal.atac.fhda.edu b) mac.eng.sony.com

c) kmp.acct.sony.jp d) gsfc.nasa.gov.

vi) Variables are declared in Java Script using which of the following ?

a) dim b) var

c) function d) variable.

vii) In IPv6, option length is

a) 4 b) 5

c) 3 d) infinite.

viii) Which of the following syntax is correct for commenting lines in XML ?

a) /I b) I * comments * I

c) : : d) <!--comments-->

ix) The .... in XML is equivalent to the schema in database.

a) Element b) Attribute

c) Parser d) DTD.

x) An XML parser is used to .... the contents of an XML document.

a) display b) read but not interpret

c) read and interpret d) none of these.

xi) Which statement is true ?

a) XML tags are case sensitive

b) XML documents must have a root tag

c) XML elements must be properly closed

d) all the statements are true.

xii) Cookies are stored in

a) Web Server b) Web Browser

c) Database Server d) Application Server.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following.   3 × 5 = 15

2. What are cookies and sessions ? Why is a session object considered more secure and advantageous than cookies ?

3 + 2

3. Compare POST and GET methods.

4. Why is HTTP stateless ? How is statelessness of HTTP overcome to run E-commerce applications on Web ?   2 + 3

5. Explain the life cycle of a Java servlet.

6. Briefly explain JSP architecture.

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following.   3 × 15 = 45

7. a) Define DTD. Explain different types of DTD with example.

b) Prepare an XML document for the following table with internal DTD definition :

STUDENT

NAME	STUD_ID	Department
Ms.XYZ TYU	STUD_0001	I.T
Mr.GHJ TRE	STUD_0002	E.C.E

c) What are elements and attributes ? Describe with examples.

d) What is XML ?   1 + 2 + 6 + 4 + 2

8. a) State the main objectives of J2EE. Describe briefly about J2EE architecture.

b) Write a simple servlet program which will return the current date and time.

c) What is Web container? What is servlet engine ?

(5 + 4) + 3 + 3