CS/B.TECH/IT/ODD SEM/SEM-7/IT-701/2016-17

MAULANA ABUL KALAM AZAD UNIVERSITY OF
TECHNOLOGY, WEST BENGAL
Paper Code : IT-701
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 the following :

                                        $10 \times 1 = 10$

i) If the fragment offset has a value of 100, it means
    that

    a) The datagram has not been fragmented

    b) The datagram is 100 bytes in size

    c) The first byte of the datagram is of byte 100

    d) The first byte of the datagram is of byte 800.

ii) A WAN using the OSPF protocol that connects two
     routers is an example of a .... type of OSPF
     network.

     a) point-to-point   b) transient

     c) stub   d) virtual.

iii)· Which statement is true ?

     a) All the statements are true

     b) All XML elements must have a closing tag

     c) All XML elements must be in lower case

     d) All XML documents must have a DTD.

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

     a) between transport and internet layer

     b) between data link and physical layer

     c) between application and transport layer

     d) none of these.

v) <script type = "text/javascript">

    x = 4 + "4";

    document.write(x);

    </script>

    Output ..... ?

    a) 44   b) 8

    c) 4   d) Error output.

vi) .... allow style sheets to differentiate between different element type.

   a) Pseudo-classes   b) Pseudo-elements

   c) Contextual selectors   d) Classes.

vii) The use of a DTD in XML development is

   a) required when validating XML documents

   b) no longer necessary after the XML editor has been customized

   c) used to direct conversion using an XSLT processor

   d) a good guide to populating a template to be filled in when generating an XML document automatically.

viii) Which is the correct CSS syntax ?

   a) {body:color = black(body)}

   b) body {color : black}

   c) body:color = black

   d) {body;color:black}

ix) RIP is based on

   a) Link State Routing

   b) Distance Vector Routing

   c) Path Vector Routing

   d) none of these.

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

   a) display

   b) read & interpret

   c) read but not interpret

   d) none of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following : $3 \times 5 = 15$

2. What do you mean by Internet ? Give a comparison among Intranet, Extranet and Internet.   2 + 3

3. What are cookies and sessions ? Why a session object is considered more secure and advantageous than cookies ?   2 + 3

4. Describe the life cycle of java applet with diagram.   5

5. Differentiate between Clint side scripting and Server side scripting language. What are the benefits of CSS.   2 + 3

6. A network IP address is given as 192.168.110.25/27. Find the subnet mask, network address and no. of host possible in the network.   5

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. a) State the differences between IPV4 and IPV6 packet format ?

   b) Discuss about the differences of connection-less and connection oriented protocol of transport layer.

   c) Discuss about the disadvantages of Distance Vector routing.

   d) What is socket ? Discuss about the Client side and Server side socket in Java. $4 + 4 + 2 + 5$

   a) Write a brief note on the role of Java Script in client side data validation with suitable examples. State briefly the need of client side data validation.

   b) Write a program in Java Script to –

      i) calculate the area of a circle where radius will be as per user requirement.

      ii) toggle the background color on clicking between Red, Green & Blue marked buttons.

   c) Write a PERL script to find out the Factorial for a given number. $5 + 6 + 4$

9. a) What is firewall ? Describe something about different types of firewall.

   b) How do we configure different types of firewall ? What is denial of service attacks ?

   c) What is the difference between Warm and Trojan horse ? $4 + 6 + 5$

10. a) What is XML ? What is the basic structure of an XML document ?

    b) What is DTD ? What are the different types of DTDs ?

    c) Distinguish between SAX and DOM Parser.

    d) Create an XML document that describes the following : $2 + 3 + 5 + 5$

Employee ID	Name	Department	Date of Joining	Current Salary
E 001	MR. X	A	02/07/1978	Rs. 30,000.00
E 003	MR. Y	B	11/11/1998	Rs. 20,000.00
E 006	MR. Z	C	25/03/2003	Rs. 15,000.00

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

   a)   VPN

   b)   Trojan Horses and Eavesdropping

   c)   VoIP

   d)   SSL

   e)   Web Crawler.

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