

6/12/19E

This question paper contains 4 printed pages.

Your Roll No.

Sl. No. of Ques. Paper : 8299 J
Unique Paper Code : 32345301
Name of Paper : Computer Networks and Internet Technologies
Name of Course : Computer Science : Generic Elective
Semester : III
Duration : 3 hours
Maximum Marks : 75

Section A is compulsory.

Attempt any five questions from Section B.

SECTION A

1. (a) Give three differences between TCP/IP and OSI network models. 3
- (b) Assuming that ten devices are to be arranged in a mesh topology, how many cables are needed? How many ports are needed for each device? Assume that all connections are full-duplex. 2
- (c) What is Cladding? 2
- (d) Give HTML code to do the following using style tag :
 - (i) set the color of heading (h1) as red
 - (ii) set the color of paragraph as blue. 3
- (e) Write an HTML statement to make an image as marquee. 2

P.T.O.

- (f) Give any three advantages of using CSS. 3
- (g) What is an event in JavaScript? What is focus event? 2
- (h) Find the output of the following code :
- (i) `document.write("1" + 5 + "3");`
- (ii) `var x = 10;`
`var y = "10";`
`document.write(x == y);` 2
- (i) What is the difference between simplex, half-duplex and full-duplex in transmission modes? 3
- (j) What is the difference between Internet and Extranet? 3

SECTION B

2. (a) At what layer(s) in the OSI model do the following network devices operate :
- (i) Router
- (ii) Hub
- (iii) Bridge
- (iv) Gateway
- (v) Repeater. 5
- (b) Write a JavaScript program to enter the name, roll no, subject and marks of a student. If the marks > 100, display an alert box with message "Erroneous data", else the alert box should display the message "Fine". 5
3. (a) Differentiate between guided and unguided transmission media. 5

- (b) Design an HTML page with two textboxes and two radio buttons named enter, number, result, square and cube respectively. Write a JavaScript code :
- (i) that accepts the entered text as a numeric value from the first text box
- (ii) depending upon the selected radio button, displays the output in the result box as square or cube of the number entered. 5

4. (a) What is CSS? Describe four ways of using CSS in HTML page. 5
- (b) What are the parameters that affect the effectiveness of a communication system? 5
5. (a) Write a JavaScript statement to set the background color of an HTML document as red. 2
- (b) Describe two attributes of form tag. 3
- (c) Write an HTML code to create a window that is divided into three horizontal frames, in which first two rows are further divided into two columns and the last row is as it is as shown below : 5

Frame 1	Frame 2
Frame 3	Frame 4
Frame 5	

6. (a) What is the difference between ring and bus topologies? 4
- (b) Write a code to create the following structure in HTML :
- Assume that company logo is an image stored in the file abc.jpg at C:\Document\desktop. 6

Invoice #123478		14 April 2024		Company Logo
Pay to : Acme Billing Co. 123, Main Street Delhi 12345		Customer : AK Singh 321, Sub Way Delhi West 110046		
Name/Desc	Qty	@	Cost	
Paperclips	100	20	2000	
Staplers	150	40	6000	
Total			8000	

7. (a) Give two services provided by each layer of the OSI model. 7
- (b) Briefly describe any three attributes of table tag in HTML. 3
8. (a) What is the purpose of using : 2×4=8
- (i) FTP
 - (ii) Telnet
 - (iii) HTTP
 - (iv) m-Commerce.
- (b) Give one advantage and one disadvantage of Wireless LAN network over wired network. 2