Unique Paper Code   : 62344328-OC

Name of the Paper   : Computer Networks and Internet Technologies

Name of the Course   :   B. A. Programme (Old Course)

Semester   :   III

Duration of Examination :   3 Hours

Maximum Marks   :   75

Year of Admission   : 2015, 2016, 2017, 2018

Instructions for Candidates :

Attempt any four questions.

All questions carry equal marks

Q1. Describe the job of a router and how it is different from switches? How a point to point connection is different from a multipoint connection? Give an example of each.

Write an HTML code to create the following lists:

<u>Restaurant Menu</u>

I.   Salads
- Green Salad
- Russian Salad

II. Main Course
a. Veg
  - Paneer
  - Dal
  - Mixed Veg
b. Non Veg
  - Chicken
  - Mutton
  - Fish

Q2. Describe the responsibilities of physical layer in TCP/IP model? Which of the model among TCP/IP and OSI models is used on Internet these days? Which layers of the OSI model are not present in the TCP/IP model? Which layer(s) of the TCP/IP model fulfils the functionality of the missing layers in OSI model?

What is Cascading Style Sheet (CSS)? What are the benefits of CSS? Write code to apply CSS in an HTML document by the following two ways:
- inserting CSS code within the same HTML file, and
- using a separate CSS file.

Q3. Describe different parts of a URL. What is the role of HTTP protocol and at which layer does it work? What are the steps to be followed in order to fetch a web page from a server?

What is the role of an HTML frame? Write the HTML code to create the following frames on a web page:

frame1	frame 3
frame 2	

Frame1 should link to an HTML page having content "GOOD MORNING", frame 2 should link to an HTML page having content "BEST OF LUCK" and the frame 3 should link to the home page of any academic institution.

Q4. Among LAN, MAN and WAN, to which category does your college network fall and which category does the "Internet" belong to? What is the purpose of using a repeater in a computer network? Further, in which type of transmission, data is allowed to travel in both directions but only in one direction at a given time.

Write an HTML code to generate the following table:

Roll No	Name		Course
	First Name	Last Name	
100	Charu	Mehta	BA Hons.
101	Adarsh	Gupta	BA Prog.
102	Harsh	Goenka	BA Prog.

Q5. During data communication, how the layered approach works in the OSI model? Use an example to describe the flow of data from one layer to another while passing a message from source to the destination.

Write JavaScript code to create the following form and perform the given operations:

X : [   ]   Y : [   ]   Z : [   ]

RESULT : [   ]

[SUM]   [AVERAGE]

On clicking "SUM" button, the sum of X, Y and Z should be displayed in "Result" box. On clicking "AVERAGE" button, the average of X, Y and Z should be displayed in "Result" box.

Q6. Describe, how a connection is established in connection oriented and connection less protocols? Does the TCP/IP reference model supports both connection-oriented and connectionless service? If yes, describe the protocols supporting each type of service.

Out of the following, which is a valid IPv4 address: 232.67.48.26, 187.34.278.33. Justify your answer.

What is the purpose of a <pre> tag in HTML? Write an example of HTML code using <pre> tag.