तब तक तक प्रश्न-पुस्तिका न खोलें।

DO NOT OPEN THE QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.
PART ONE
(Answer all the questions)

1. Each question below gives a multiple choice of answers. Choose the most appropriate one and enter in the “OMR” answer sheet supplied with the question paper, following instructions therein. (1x10)

1.1 IPv6 addressed have a size of
A) 32 bits B) 64 bits
C) 128 bits D) 256 bits

1.2 TCP/IP is a ______ hierarchical protocol suite developed before the OSI model.
A) 7-layers B) 5-layers
C) 4-layers D) 3-layers

1.3 Raj can receive his e-mail, but he cannot send e-mail. Which of the following is most likely causing his problem?
A) POP3 B) SMTP
C) IMAP D) UART

1.4 The 4 byte IP address consists of
A) Network Address B) Host Address
C) Both A) and B) D) None of the above

1.5 The default port for SMTP is:
A) 21 B) 23
C) 25 D) 80

1.6 In this topology there is a central controller or hub
A) Star B) Mesh
C) Ring D) Bus

1.7 A computer communication technology that provides a way to interconnect multiple computers across short distance is
A) LAN B) WAN
C) MAN D) None of the above

1.8 A webpage displays a picture. What tag was used to display that picture?
A) picture B) image
C) img D) src

1.9 What is the correct HTML for adding a background color?
A) <body color="yellow">
B) <body bgcolor="yellow">
C) <background>yellow</background>
D) <body background="yellow">

1.10 A proxy firewall filters at the
A) Physical layer B) Application layer
C) Data link layer D) Network layer

2. Each statement below is either TRUE or FALSE. Choose the most appropriate one and enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein. (1x10)

2.1 Mesh topology is highly reliable.
2.2 255.0.0.0 is default network mask for CLASS A.
2.3 Printer can be shared in LAN by many users.
2.4 POP is the incoming email server.
2.5 .com is represents education domain.
2.6 Internet Service Provider provides services for web hosting.
2.7 ASP is server side scripting language.
2.8 HTML is generally use for web designing purpose.
2.9 TELNET protocol is working on port 24.
2.10 UDP is used where the acknowledgement from receiver side must be needed.
3. Match words and phrases in column X with the closest related meaning/word(s)/phrase(s) in column Y. Enter your selection in the “OMR” answer sheet supplied with the question paper, following instructions therein. (1x10)

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is stateless protocol.</td>
<td>A. ARPANET</td>
</tr>
<tr>
<td>It is used to create static web page.</td>
<td>B. DNS</td>
</tr>
<tr>
<td>It can be accessed from any email client.</td>
<td>C. ISDN</td>
</tr>
<tr>
<td>It is used to exchange different kinds of data files on the Internet: audio, video, images, application programs.</td>
<td>D. FDDI</td>
</tr>
<tr>
<td>It is used to establish a direct connection between two nodes.</td>
<td>E. IMAP4</td>
</tr>
<tr>
<td>First network to implement TCP/IP suite.</td>
<td>F. ATM</td>
</tr>
<tr>
<td>It is token ring based protocol.</td>
<td>G. IRC</td>
</tr>
<tr>
<td>It is hierarchical decentralized naming system for computers.</td>
<td>H. SGML</td>
</tr>
<tr>
<td>It is used for digital transmission of voice, video, data and other network services over the traditional circuits.</td>
<td>I. File Transfer Protocol</td>
</tr>
<tr>
<td>FTP</td>
<td>J. PPP</td>
</tr>
<tr>
<td>K. HTML</td>
<td></td>
</tr>
<tr>
<td>L. HTTP</td>
<td></td>
</tr>
<tr>
<td>M. SLIP</td>
<td></td>
</tr>
</tbody>
</table>

4. Each statement below has a blank space to fit one of the word(s) or phrase(s) in the list below. Choose the most appropriate option, enter your choice in the “OMR” answer sheet supplied with the question paper, following instructions therein. (1x10)

<table>
<thead>
<tr>
<th>A.</th>
<th>B.</th>
<th>C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeater</td>
<td>Router</td>
<td>IRC</td>
</tr>
<tr>
<td>D.</td>
<td>E.</td>
<td>F.</td>
</tr>
<tr>
<td>MAC address</td>
<td>&lt;script&gt;</td>
<td>IP address</td>
</tr>
<tr>
<td>G.</td>
<td>H.</td>
<td>I.</td>
</tr>
<tr>
<td>SLIP</td>
<td>&lt;head&gt;</td>
<td>UDP</td>
</tr>
<tr>
<td>J.</td>
<td>K.</td>
<td>L.</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>ATM</td>
<td>&lt;!DOCTYPE&gt;</td>
</tr>
<tr>
<td>M.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1 _______ provides a universal platform to support commercial activities across the globe.
4.2 <meta> element can be added in the _______ section of HTML page.
4.3 _______ is mainly designed for group communication in discussion forums, but also allows one-on-one communication via private messages.
4.4 _______ is physical address of computer.
4.5 _______ is device which is used in Network layer.
4.6 _______ uses encodes data into small, fixed-sized packets.
4.7 Using _______ tag, you can add JavaScript in HTML document.
4.8 _______ is used to identify computer in network.
4.9 _______ is an encapsulation of the Internet Protocol designed to work over serial ports and modem connections.
4.10 The _______ declaration must be the very first thing in your HTML document, before the <html> tag.
PART TWO
(Answer any FOUR questions)

5. 
   a) Give difference between hub and switch.
   b) Explain FDDI.
   c) What is Network topology? List all topologies. Explain any three.

6. 
   a) What is firewall? Explain types of firewall.
   b) Explain the use of SSL to secure the network.
   c) What is the difference between LAN, MAN & WAN?

7. 
   a) What is HTML? Explain principals of web designing.
   b) Explain IP addressing scheme.
   c) Write a HTML code using TABLE tag and create following structure:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>H</td>
<td>I</td>
<td>J</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td></td>
</tr>
</tbody>
</table>

8. 
   a) What is CGI?
   b) Explain domain name system.
   c) Explain TCP/IP in brief.

9. Write short notes on:
   a) WWW
   b) Digital Signature
   c) Search Engine