Unique Paper Code : 32345302
Code of the Paper : GE-III
Name of the Paper : Computer Networks
Name of the Course : B.Sc. (H)
Semester : Semester - III
Duration of Examination : 3 Hours
Maximum Marks : 75

Instructions for Candidates:

i. Attempt any four questions from Question 1 to Question 6.
ii. Each Question carries equal marks.
Q.1. Briefly describe the functionality of each layer of the ISO-OSI reference model and draw a labeled diagram that shows the ordering of the layers of this model. Contrast the ISO-OSI model with the TCP/IP model.

Further, Create a web page using Definition, Unordered, and ordered lists in HTML as shown below:

```
My School Library
My school has a big library with lots of books.
Click on any of the categories to see the list of books available:

1. Fiction
   - Mystery
   - Comedy
   - Drama

2. Reference Books
   - Science
   - Maths
   - Social Science

3. Languages
   - Hindi
   - English
   - Sanskrit
```

Q.2. Describe components of a data communication system with the help of a labeled diagram.
Further, differentiate between Cell Spacing and Cell Padding with syntax in Table Tag. Create a table in HTML as shown below:

```
<table>
<thead>
<tr>
<th>Name</th>
<th>Last</th>
<th>Init.</th>
<th>Course</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Morgan</td>
<td>A B</td>
<td>Fishing</td>
<td>5</td>
</tr>
<tr>
<td>Jones</td>
<td></td>
<td>D J</td>
<td>Sailing</td>
<td>8</td>
</tr>
</tbody>
</table>
```
Q.3. Briefly discuss TELNET and FTP. Compare and Contrast optical fiber over twisted pair and co-axial cable.

Further, create a form in HTML as shown below:

![Form Image]

Q.4. Write short notes on:
- Radio Waves
- Microwaves
- Line-of-Sight propagation
- URL
- URI
- URN

Further, explain the concept of external and internal linking in HTML with suitable example codes.
Q.5. Describe LAN, MAN, and WAN.

Also, discuss the different ways to apply a style sheet to an HTML document using examples. Create a web page as shown below with bookmarks in HTML:

![Image of a web page with bookmarks](image1)

Q.6. Provide the layers at which Repeaters, Hubs, Bridges, Switches, Routers, and Gateways operate and give a brief description of their functionalities.

Also, create a HTML document (having two frames) which will appear as follows:

![Image of an HTML document with two frames](image2)