ASSIGNMENT NO. 3

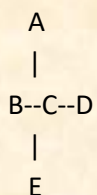**SUBJECT: INFORMATICS PRACTICES   CLASS-XII   JULY,2025**

Importing/Exporting Data between CSV Files using Pandas

Q1. What is the difference between `read_csv()` and `to_csv()` functions in Pandas?

Q2. Write a Pandas program to read data from a CSV file named `sales.csv` and display its first 5 rows. Assume the file contains columns: Date, Product, Quantity, Price.

Q3. Mention any two parameters of the `read_csv()` function and their purpose.

Q4. Write a Python program using Pandas to export a DataFrame `df` to a CSV file named `output.csv`, without the index column.

Q5. Aman is trying to read data from a file `students.csv`, but is getting a `FileNotFoundError`. Write the probable reason and how it can be handled in the program.

Computer Networks

Q6. Differentiate between MAC address and IP address.

Q7. Expand the following:

a) Wi-Fi

b) VoIP

Q8. What is the role of a router in a network?

Q9. Define the terms:

a) Firewall

b) Bandwidth

Q10. What are transmission media? Explain guided and unguided transmission media with examples.

Q11. Identify the network topology from the diagram and write one advantage of this topology:

```
  A
  |
B--C--D
  |
  E
```

Q12. Write any two differences between LAN and WAN.

Q13. What is the importance of a modem in networking?

Q14. Explain the function of the following protocols:

a) SMTP

b) POP3

Q15. What is the function of DNS in internet communication?

Introduction to Internet and Web

Q16. What is the difference between the Internet and the World Wide Web (WWW)?

Q17. Define the following terms:

a) Web Browser

b) Web Server

Q18. Explain the term URL. What are its main components?

Q19. What is the role of a search engine? Name any two search engines.

Q20. Mention any two advantages and two disadvantages of the internet.

Q21. Define the term "Netiquette". List two examples.

Q22. Differentiate between Static and Dynamic websites.

Q23. What is a hyperlink? How is it useful on the web?

Q24. Expand the following:

a) HTTP

b) HTML

Q25. State any two safety measures you should follow while browsing the internet.