





- vi) List in which layer following device works :
- |           |             |
|-----------|-------------|
| a) Router | b) Repeater |
| c) Bridge | d) Gateway. |

**3. Attempt any four :** **16**

- i) Explain the concept of Hand off operation in mobile phones.
- ii) Explain the concept gateway along with its working.
- iii) What is topology ? List its types.
- iv) Explain the concept of FTP with neat diagram.
- v) Explain working of packet switching.
- vi) Explain the term leased line.

**4. Attempt any four :** **16**

- i) Differentiate between LAN and WAN on following points :

a) Speed	b) Area
c) Installation Cost	d) Communication media.
- ii) Differentiate between analog and digital signal.
- iii) Explain the term DQDB.
- iv) Explain the concept of virtual LAN.
- v) Differentiate between TCP and UDP.
- vi) Define standards and list standard creation committees.

**5. Attempt any four :** **16**

- i) Define IP. State its types along with range and subnet masks.
- ii) What are the problems in the Internet working ?
- iii) Explain the protocol ARP.
- iv) State advantages and disadvantages of Bus topology.
- v) Differentiate between Fast and Gigabit Ethernet.
- vi) Explain the concept of Data Fragmentation and reassembly.

**6. Attempt any four :** **16**

- i) Explain the internal architecture of ISP.
  - ii) Explain the types of Routers.
  - iii) Explain the term CRC along with suitable example.
  - iv) Differentiate between synchronous and asynchronous communication.
  - v) State the functions of bridge.
  - vi) Explain the concept of WAN addressing.
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