

Computer Networking

1. Ms. Kant Sengupta wants to prevent unauthorized access to/from his company's local area network. Write the name of a system (software/hardware), which he should install to do the above.
2. Seven Brother Fashion Inc. is a fashion company with design unit and market unit 130 meters away from each other. The company recently connected their LANs using an Ethernet cable to share the stock related information. But, after joining their LANs, they are not able to share the information due to loss of signal in between. Which device out of the following should you suggest to be installed for a smooth communication? M
(i) Modem (ii) Repeater (iii) UPS
3. Which of the following is not a feature of Networking?
(i) Resource sharing (ii) Reliability (iii) Uninterrupted power supply (iv) Reduced cost
4. Raj kamal International school is planning to connect all computers, each spread over distance within 45 meters. Suggest an economical cable type having high-speed data transfer, which can be used to connect these computers.
5. Write the name of the most suitable wireless communication channels for each of the following situations
(i) Communication between two offices in different countries.
(ii) To transfer the data from one mobile phone to another.
6. Chander Vardhan is not able to identify the Domain Name in the given URL. Identify and write it for him.
7. Why a switch is called an intelligent hub?
8. What is the use of Repeater in a Network?
9. Distinguish between LAN and WAN.
10. What is the purpose of Modem in network?
11. Write one example of IP Address.
12. Identify the type of topology from the following:
(i) In it, each node is connected with the help of a single co-axial cable.
(ii) In it, each node is connected with the help of independent cable with the help of a central switching
13. Define the following with reference to Threats to network security. 2 M
(i) Worm (ii) Trojan Horse
14. Ms. Rani Sen, General Manager of Global Nations Corporate recently discovered that the communication between her company's accounts office and HR office is extremely slow and signals drop quite frequently. These offices are 125 meters away from each other and connected by an Ethernet cable.
(i) Suggest her a device, which can be installed in between the offices for smooth communication.
(ii) What type of network is formed by having this kind of connectivity out of LAN,MAN and WAN?
15. Give an advantage of using Star topology over Bus topology. Show a network layout of star topology to connect 5 computers
16. Give suitable example of URL and Domain name
17. What is MAC address? What is the difference between MAC address and an IP address?
18. Identify the following device :
(i) A device that is used to connect different types of network. It performs the necessary translation so that the connected network can communicate properly?
(ii) A device that converts data from digital bit stream into an analog signal and vice versa.

19. Write one advantage and one disadvantage of using Optical fiber cable.
20. Define 'Domain Name Resolution'.
21. What do you understand by Network Security? Name two common threats to it.