

BRAIN INTERNATIONAL SCHOOL

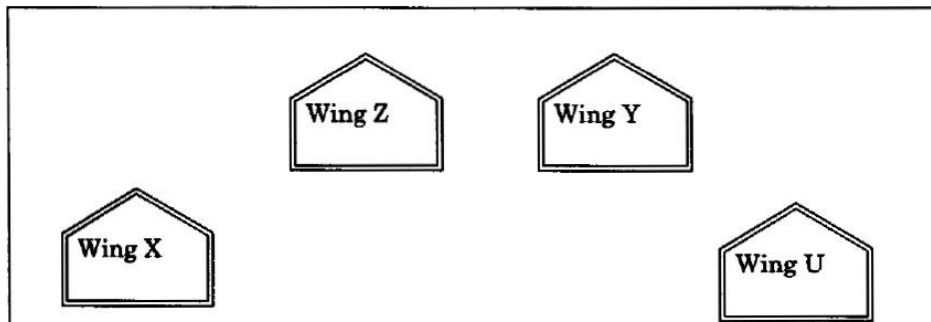
SUBJECT: C.S.

CLASS-XII Assignment

November-2024

Ch-11 Networking

Q1. The ABC Pvt Ltd has set up its new Branch at Jammu for its office and web based activities. It has 4 Wings of buildings as shown in the diagram:



Center to center distances between various blocks

Wing X to Wing Z	50m
Wing Z to Wing Y	70m
Wing Y to Wing X	125m
Wing Y to Wing U	80m
Wing X to Wing U	175m
Wing Z to Wing U	90m

Number of Computers

Wing X	50
Wing Z	30
Wing Y	150
Wing U	15

- (i) Suggest a most suitable connection between the Wings, and topology.
- (ii) Suggest the most suitable place (i.e. Wing) to house the server of this organization with a suitable reason, with justification.
- (iii) Suggest the placement of the following devices with justification:
(1) Repeater (2) Hub/Switch
- (iv) The organization is planning to link its head office situated in Delhi with the offices at Jammu. Suggest an economic way to connect it; the company is ready to compromise on the speed of connectivity. Justify your answer.

Q2. XYZ company's head office is in Delhi. There are 20 computers connected with a single Switch. One branch of company is in remote area of Arunachal Pradesh. Company is using satellite for communication with that office.

1. Which type of topology out of the following company is using in Delhi office?
(A) Star

- (B) Ring
- (C) Bus
- (D) Tree

2. Which type of network the company is forming while communicating with office situated in Arunachal Pradesh.

- (A) LAN
- (B) MAN
- (C) WAN
- (D) PAN

Q3. Explain URL

Q4. Explain HTTP, FTP, SMTP, VoIP, TCP/IP

Q5. Explain any 4 types of Networking Topologies

Q6. Explain the following devices.

- (1) Switch
- (2) Hub
- (3) Router
- (4) Gateway
- (5) Bridge

Q7. Explain RJ-45 Connector

Q8. Explain IP Address and MAC Address

Q9. Explain Repeaters.

Q10. Differentiate between Circuit Switching and Packet switching Techniques.

Q11. Explain NIC.