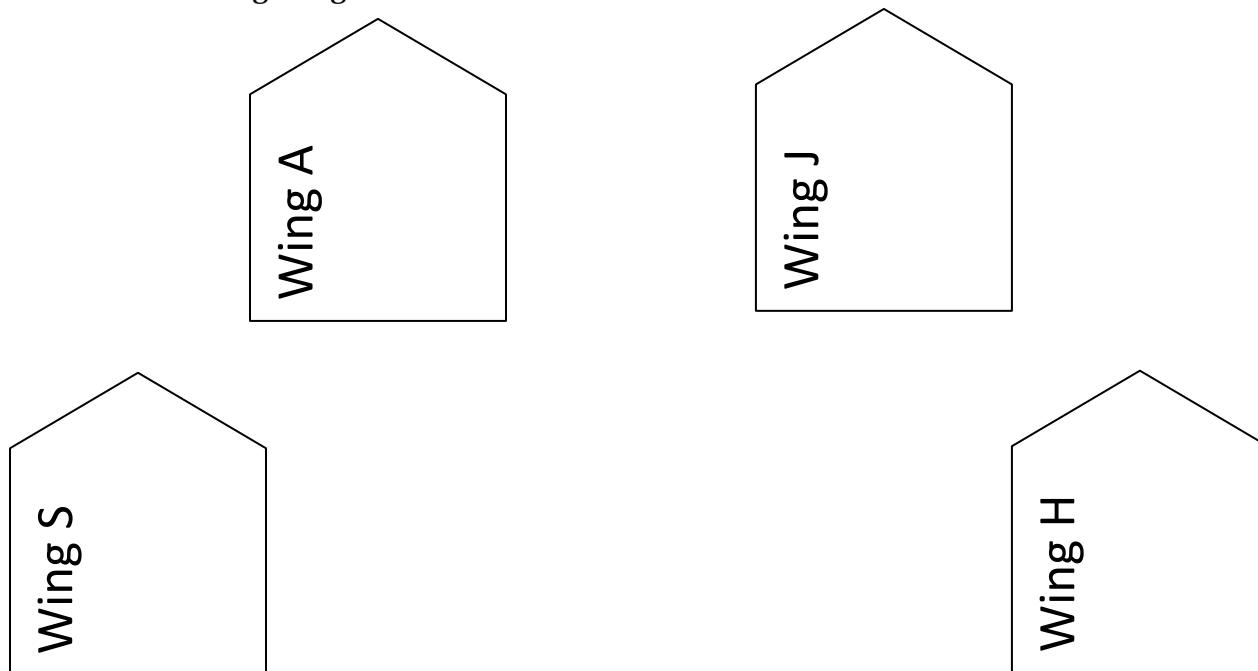


Assignment of C0mputer Networking

1. (a) Define the following: (i) Piconets (ii) GSM.
- (b) Write the full form of the following
- (i) PHP (ii) VIRUS (iii) SMSC (iv) W3C
- (c) Write any two disadvantages of 2G technology. What is 4G?
- (d) Define spam and Blog.
- (e) INDIAN PUBLIC SCHOOL in Darjeeling is setting up the network among its different wings. There are 4 wings named as SENIORS(S), JUNIORS(J), ADMIN(A) and HOSTEL(H) as shown in the diagram given below:



Distance between various wings:

Wing A to Wing S	70m
Wing A to Wing J	200m
Wing S to Wing J	150m
Wing S to Wing H	100m
Wing J to Wing H	450m
Wing A to Wing H	400m

Number of computers

Wing A	10
Wing S	200
Wing J	100
Wing H	50

(i) Suggest the most suitable cable layout of connections among the wings and technology.

(ii) The school wants to provide and share internet access in and among each of the buildings. How can this be achieved?

(iii) Suggest the placement of the following devices with justification:

(a) Repeater (b) Server

(iv) The school is planning to connect its head office in the closest big city, which is more than 350 km from the school campus. Which type of network out of LAN, MAN or WAN will be formed? Justify your answer.

(f) Write the difference between “Open Source Software” and “Proprietary Software”.

(g) What is “Web Scripting”?

2. (a) Write one advantage and disadvantage of Ring Topology.

(b) Expand the following terms with respect to Networking.

i). SMTP

ii). SMS

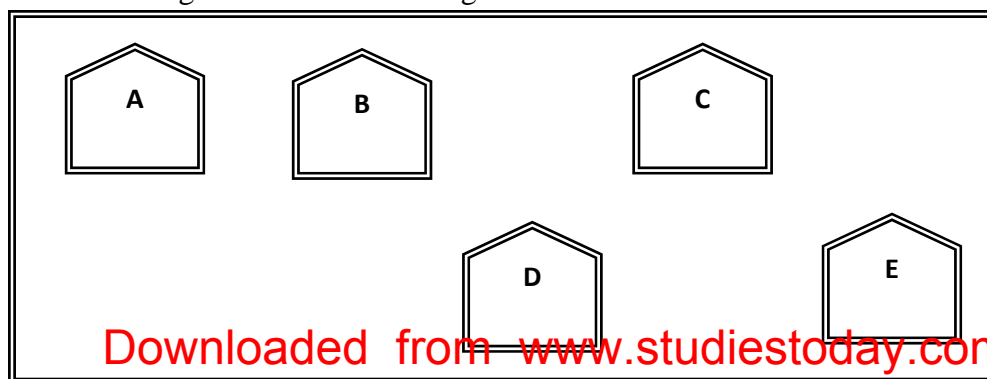
iii). NIC

iv). PPP

(c) Differentiate between HTML and XML?

(d) Define in 20 words only : hackers , crackers.

(e) Standard Bank has set up its new center in India for its office and web based activities. It has five buildings as shown in the diagram below:



Distance between various buildings	
A to B	50 Mts
B to C	30 Mts
C to D	30 Mts
D to E	35 Mts
E to C	40 Mts
D to A	120 Mts
D to B	45 Mts
E to B	65 Mts

No of computers	
A	55
B	180
C	60
D	55
E	70

Suggest a possible cable layout for connecting the buildings.

- i). Suggest the most suitable place to install the server of this organization with a suitable reason.
- ii). Suggest the placement of the following devices with justification.
 - a) Hub/Switch
 - b) Modem
- iv) The company wants to link its head office in 'A' building to its Office in Sydney
 - a) Which type of transmission medium is appropriate for such a link?
 - b) What type of network this connection result into?

3. (a) Compare any two Switching techniques.

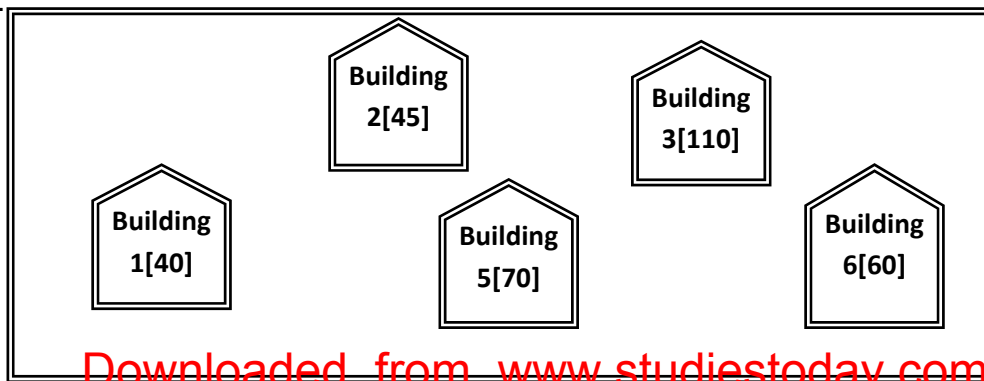
(b) What do you mean by Telnet ?

(c) Differentiate between Shareware and Freeware ?.

(d) Expand the followings :

i) SIM, ii) FSF, iii) PPP, iv) POP3

(e) Rajdhani Public Ltd. has decided to network all its offices spread in five buildings(Shown below).



The distance between buildings are given below:

Between 1 & 2	20 Mts
Between 2 & 3	50 Mts
Between 3 & 4	120 Mts
Between 4 & 5	30 Mts

Between 3 & 5	70 Mts
Between 1 & 5	65 Mts
Between 2 & 5	50 Mts

- (i) Suggest cable layout(s) for connecting the buildings.
- (ii) Suggest the most suitable building to install the server of this organization with a suitable reason with justification.
- (iii) In each of the building, the management wants that each LAN segment gets a dedicated bandwidth i.e. bandwidth must not be shared. How can this be achieved ?
- (iv) The company wants to link another office in Japan. How can link be established with this office. (i.e. suggest the transmission medium).