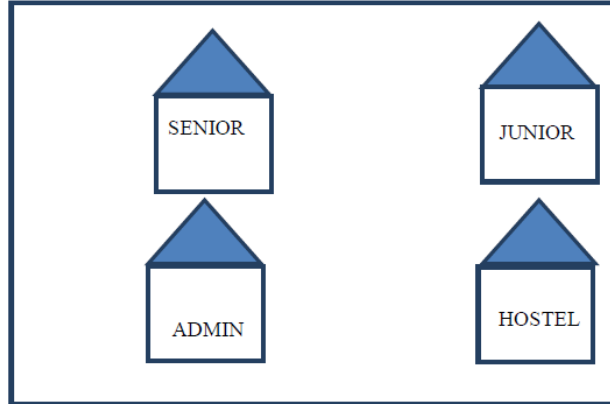


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1 Multipurpose Public School, Bangluru is Setting up the network between its Different Wings of school campus. There are 4 wings named as SENIOR(S), JUNIOR(J), ADMIN(A) and HOSTEL(H). Multipurpose Public School, Bangluru



Distance between various wings are given below:

WingAtoWingS	100m
WingAtoWingJ	200m
WingAtoWingH	400m
WingStoWingJ	300m
WingStoWingH	100m
WingJtoWingH	450m

Number of Computers installed at various wings are as follows:

<u>Wings</u>	<u>NumberofComputers</u>
WingA	20
WingS	150
WingJ	50
WingH	25

Suggest the best wired medium and draw the cable layout to efficiently connect various wings of Multipurpose Public School, Bangluru.

Name the most suitable wing where the Server should be installed. Justify your answer.

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	<p>Suggest a device/software and its placement that would provide data security for the entire network of the School.</p> <p>Suggest a device and the protocol that shall be needed to provide wireless Internet access to all smartphone/laptop users in the campus of Multipurpose Public School, Bangluru.</p>
<p>Ans</p>	<p>Best wired medium: Optical Fibre OR CAT5 OR CAT6 OR CAT7 OR CAT8 OR Ethernet Cable</p> <div> <pre> graph TD SENIOR --- JUNIOR SENIOR --- ADMIN SENIOR --- HOSTEL JUNIOR --- HOSTEL </pre> </div> <p>Wing Senior(S)- Because it has maximum number of computers.</p> <p>Firewall - Placed with the server at Senior OR Any other valid device/software name</p> <p>Device Name: WiFi Router OR WiMax OR RF Router OR Wireless Modem OR RFTransmitter Protocol : WAP OR 802.16 OR TCP/IP OR VOIP OR MACP OR 802.11</p>
<p>2</p>	<p>Write the expanded names for the following abbreviated terms used in Networking and Communications: (i) CDMA (ii) HTTP (iii) XML (iv) URL</p>
<p>Ans</p>	<p>(i) Code Division Multiple Access (ii) Hyper Text Transfer Protocol (iii) Extensible Markup Language (iv) Uniform Resource Locator</p>
<p>3</p>	<p>Your friend wishes to install a wireless network in his office. Explain him the difference between guided and unguided media.</p>
<p>Ans</p>	<p>Guided media uses cables to connect computers, whereas unguided media uses waves.</p>

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Worksheet 4- Computer Networks

4	Assume that 50 employees are working in an organization. Each employee has been allotted a separate workstation to work. In this way, all computers are connected through the server and all these workstations are distributed over two floors. In each floor, all the computers are connected to a switch. Identify the type of network?
Ans	LAN(Local Area Network)
5	Arun opened his e-mail and found that his inbox was full of hundreds of unwanted mails. It took him around two hours to delete these unwanted mails and find the relevant ones in his inbox. What may be the cause of his receiving so many unsolicited mails? What can Arun do to prevent this happening in future?
Ans	Arun's email has been attacked with spam. These may be promotional mails from different advertisement groups. Arun must have checked some promotional offers while surfing the Internet. He should create filters in his email to stop receiving these unwanted mails.
6	A teacher provides " http://www.XtSchool.com/default.aspx " to his/her students to identify the URL & domain name.
Ans	URL: http://www.XtSchool.com/default.aspx Domain name: XtSchool.com
7	Which out of the following does not come under Cyber Crime? (i) Copying data from the social networking account of a person without his/her information & consent. (ii) Deleting some files, images, videos, etc. from a friend's computer with his consent. (iii) Viewing & transferring funds digitally from a person's bank account without his/her knowledge. (iv) Intentionally making a false account on the name of a celebrity on a social networking site.
Ans	(ii) Deleting some files, images, videos, etc. from a friend's computer with his consent.
8	Expand the following:- 1. GSM 2. TDMA
Ans	GSM: Global System for Mobile Communication TDMA: Time Division Multiple Access
9	What is the significance of cookies stored on a computer?
Ans	Cookies is small text file that web servers send to a web browser so that the web server can keep track of the user's activity on a particular website.
10	Kabir wants to purchase a Book online and placed the order for that book using an ecommerce website. Now, he is going to pay the amount for that book online using his Mobile, he needs which of the following to complete the online transaction:- 1. A bank account, 2. A Mobile connection/phone which is attached to above bank account,

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Worksheet 4- Computer Networks

	3. The mobile banking app of the above bank installed on that mobile, 4. Login credentials(UserId & Password) provided by the bank, 5. All of above.																					
Ans	5. All of above.																					
11	What do you mean by data encryption? For what purpose it is used for?																					
Ans	Data encryption is a technique used for data security in which original message is converted or encoded using an algorithm into a form not understood by anyone except the person who has the key to decode it.																					
12	<p>Sanskar University of Himachal Pradesh is setting up a secured network for its campus at Himachal Pradesh for operating their day-to-day office & web based activities. They are planning to have network connectivity between four buildings. Answer the question (i) to (iv) after going through the building positions in the campus & other details which are given below:</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>The diagram shows four buildings represented by rounded rectangles within a larger rectangular frame. The buildings are positioned as follows: 'Admin' is in the top-left, 'Main Building' is in the top-right, 'Finance' is in the bottom-left, and 'Academic' is in the bottom-right.</p> </div> <p>The distances between various buildings of university are given as:-</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Building 1</th> <th>Building 2</th> <th>Distance(in mtrs.)</th> </tr> </thead> <tbody> <tr> <td>Main</td> <td>Admin</td> <td>50</td> </tr> <tr> <td>Main</td> <td>Finance</td> <td>100</td> </tr> <tr> <td>Main</td> <td>Academic</td> <td>70</td> </tr> <tr> <td>Admin</td> <td>Finance</td> <td>50</td> </tr> <tr> <td>Finance</td> <td>Academic</td> <td>70</td> </tr> <tr> <td>Admin</td> <td>Academic</td> <td>60</td> </tr> </tbody> </table> <p>Number of computers:-</p>	Building 1	Building 2	Distance(in mtrs.)	Main	Admin	50	Main	Finance	100	Main	Academic	70	Admin	Finance	50	Finance	Academic	70	Admin	Academic	60
Building 1	Building 2	Distance(in mtrs.)																				
Main	Admin	50																				
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Finance	Academic	70																				
Admin	Academic	60																				

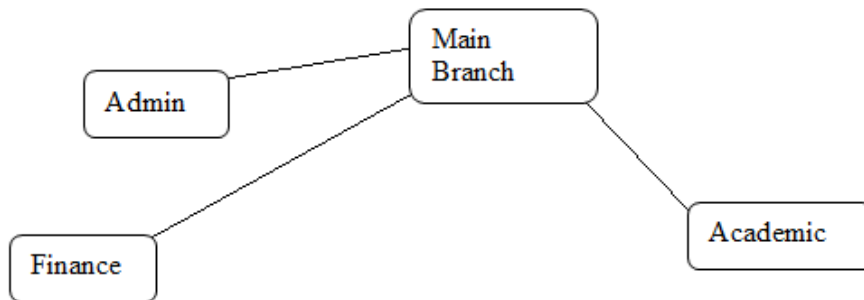
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Building	No. of Computers
Main	150
Admin	75
Finance	50
Academic	60

As a network expert, you are required to give best possible solutions for the given queries of the university administration:-


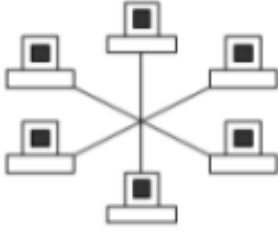

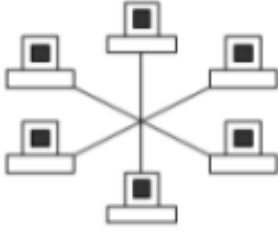

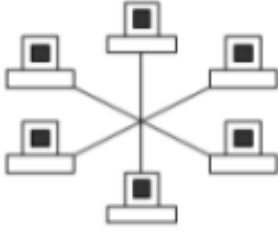
- (a) Suggest cable layout for the connections between the various buildings,
- (b) Suggest the most suitable building to house the server of the network of the university,
- (c) Suggest the placement of following devices with justification:
 - 1. Switch/Hub
 - 2. Repeater
- (d) Suggest the technology out of the following for setting-up very fast Internet connectivity among buildings of the university
 - 1. Optical Fibre
 - 2. Coaxial cable
 - 3. Ethernet Cable

Ans (a) Star topology



- (b) Server should be placed at Main Building as it has the maximum number of computers.
- (c) Hub/Switch each would be needed in all the buildings to interconnect the group of cables from the different computers in each building
A repeater needs to be placed along the wire between main building & finance building as the distance between them is more than 70 mtr.
- (d) Optical Fibre

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Worksheet 4- Computer Networks

13	Differentiate between Bus Topology and Star Topology of Networks. What are the advantages and disadvantages of Star Topology over Bus Topology?														
Ans	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Bus Topology</th> <th style="width: 50%; text-align: center;">Star Topology</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">It is characterised by common transmission medium shared by all the connected nodes.</td> <td style="padding: 5px;">It is characterised by central switching node connected directly to each of multiple nodes in the network.</td> </tr> <tr> <td style="text-align: center; padding: 10px;">  </td> <td style="text-align: center; padding: 10px;">  </td> </tr> <tr> <td colspan="2" style="padding: 10px;">Advantages of Star Topology over Bus Topology</td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <ul style="list-style-type: none"> • Faster communication as compared to Bus topology • Independent line of connection allows freedom of removing or adding nodes from the network </td> </tr> <tr> <td colspan="2" style="padding: 10px;">Disadvantages of Star Topology over Bus Topology</td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <ul style="list-style-type: none"> • Expensive as compared to Bus topology • Long cable length </td> </tr> </tbody> </table>	Bus Topology	Star Topology	It is characterised by common transmission medium shared by all the connected nodes.	It is characterised by central switching node connected directly to each of multiple nodes in the network.			Advantages of Star Topology over Bus Topology		<ul style="list-style-type: none"> • Faster communication as compared to Bus topology • Independent line of connection allows freedom of removing or adding nodes from the network 		Disadvantages of Star Topology over Bus Topology		<ul style="list-style-type: none"> • Expensive as compared to Bus topology • Long cable length 	
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14	Classify each of the following Web Scripting as Client Side Scripting and Server Side Scripting: (i) JavaScripting (ii) ASP (iii) VB Scripting (iv) JSP														
	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">(i) Client Side Scripting / Server Side Scripting</td> <td style="width: 50%; border: none;">(ii) Server Side Scripting</td> </tr> <tr> <td style="border: none;">(iii) Client Side Scripting</td> <td style="border: none;">(iv) Server Side Scripting</td> </tr> </table>	(i) Client Side Scripting / Server Side Scripting	(ii) Server Side Scripting	(iii) Client Side Scripting	(iv) Server Side Scripting										
(i) Client Side Scripting / Server Side Scripting	(ii) Server Side Scripting														
(iii) Client Side Scripting	(iv) Server Side Scripting														
15	Write the expanded names for the following abbreviated terms used in Networking and Communications: (i) SMTP (ii) VoIP (iii) GSM (iv) WLL														
	<p>(i) Simple Mail Transfer Protocol (ii) Voice over Internet Protocol (Voice over IP) (iii) Global System for Mobile Communication (iv) Wireless Local Loop</p>														

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Worksheet 4- Computer Networks

16

CASE STUDY BASED QUESTION:

Ayurveda Training Educational Institute is setting up its centre in Hyderabad with four specialised departments for Orthopedics, Neurology and Pediatrics along with an administrative office in separate buildings. The physical distances between these department buildings and the number of computers to be installed in these departments and administrative office as given as follows. You as a network

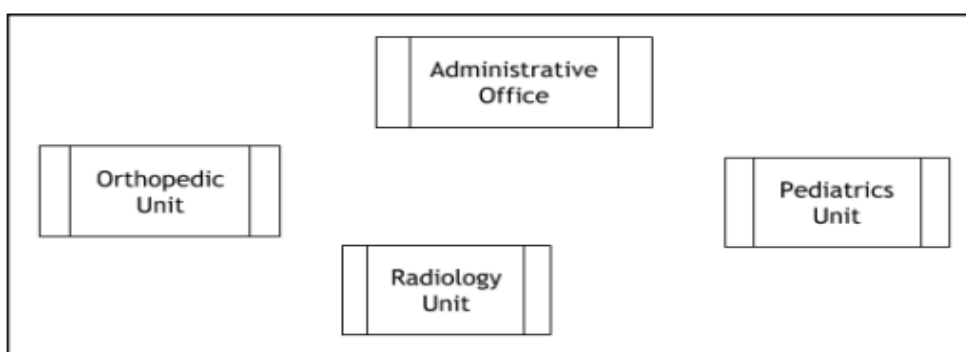
expert have to answer the queries as raised by them in (i) to (iv).

Shortest distances between various locations in metres:

Administrative Office to Orthopedics Unit	55
Neurology Unit to Administrative Office	30
Orthopedics Unit to Neurology Unit	70
Pediatrics Unit to Neurology Unit	50
Pediatrics Unit to Administrative Office	40
Pediatrics Unit to Orthopedics Unit	110

Number of Computers installed at the various locations are as follows:

Pediatrics Unit	40
Administrative Office	140
Neurology	50
Orthopedics Unit	80



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Worksheet 4- Computer Networks

Suggest the most suitable location to install the main server of this institution to get efficient connectivity.

Administrative Office

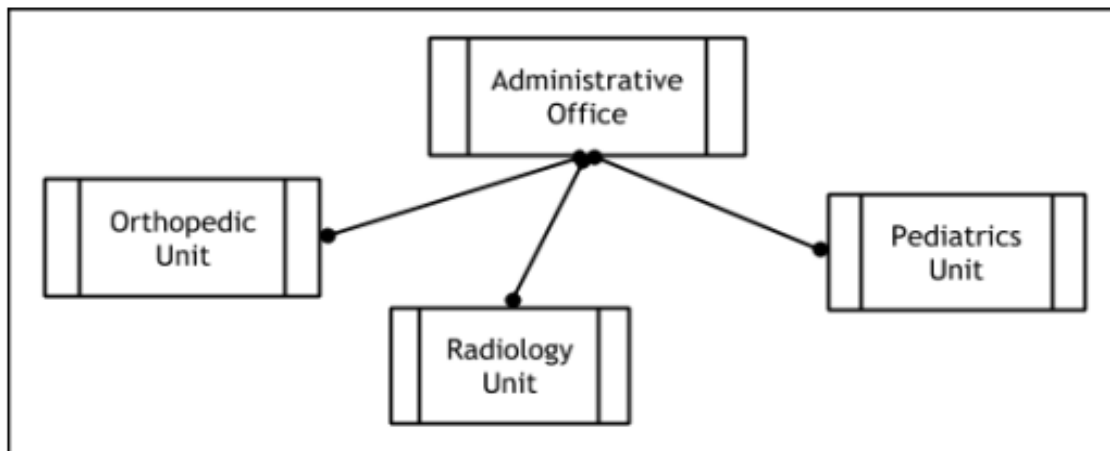
(1 Mark for writing correct location)

Suggest the best cable layout for effective network connectivity of the building having server with all the other buildings.

(iv) Suggest the topology of the network and network cable for efficiently connecting each computer installed in each of the buildings out of the following:
Topologies : Bus topology, Star Topology
Network Cable: Single Pair Telephone Cable, Coaxial Cable, Ethernet Cable

Ans Topology : Star Topology
Network Cable: Ethernet Cable / Coaxial Cable

(½ Mark for writing the correct topology)
(½ Mark for writing the correct network cable)



OR

Administrative Office is connected to Orthopedic, Radiology, Pediatrics units directly in a Star Topology

(1 Mark for drawing/writing the layout correctly)

Suggest the devices to be installed in each of these buildings for connecting computers installed within the building out of the following:

- Gateway
- Modem
- Switch

Switch

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- 17 (a) Differentiate between Packet and Circuit Switching techniques.
(b) Differentiate between MAN and LAN with the help of an example. 1
(c) Differentiate between Microwave and Radio Link in context of wireless communication medium. What are the advantages and disadvantages of using Microwave instead of Radio Link ?
(d) Write the expanded names for the following abbreviated terms used in Networking and Communications:
(i) GPRS (ii) WiFi (iii) POP (iv) SMTP

18 **CASE STUDY BASED QUESTION**

Medico Training Educational Institute is setting up its centre in Poona with four specialised units for Radiology, Neurology and ENT alongwith an administrative office in separate buildings. The physical distances between these units and the number of computers to be installed in these units and administrative office as given as follows. You as a network expert have to answer the queries as raised by them in (i) to (iv).

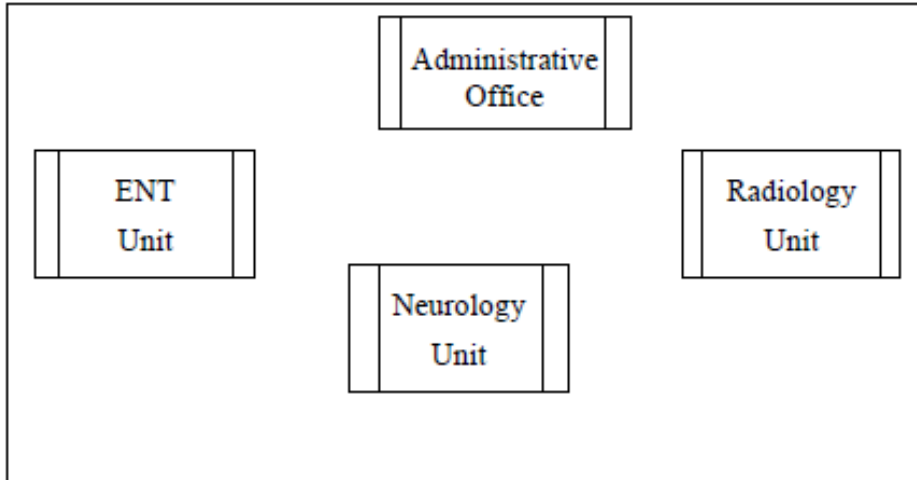
Shortest distances between various locations in metres :

Administrative Office to Radiology Unit	60
Neurology Unit to Administrative Office	40
Radiology Unit to Neurology Unit	80
ENT Unit to Neurology Unit	60
ENT Unit to Administrative Office	30
ENT Unit to Radiology Unit	120

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Number of Computers installed at various locations are as follows :

ENT Unit	50
Radiology Unit	70
Administrative Office	120
Neurology	40



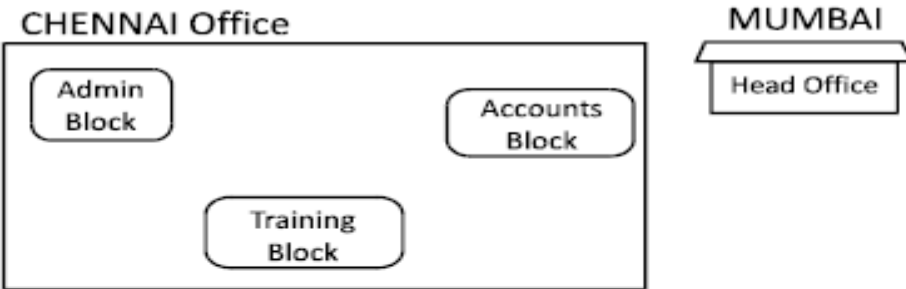
- (i) Suggest the most suitable location to install the main server of this institution to get efficient connectivity.
- (ii) Suggest the best cable layout for effective network connectivity of the building having server with all the other buildings.
- (iii) Suggest the devices to be installed in each of these buildings for connecting computers installed within the building out of the following:
 - Modem
 - Switch
 - Gateway
- (iv) Suggest the topology of the network and network cable for efficiently connecting each computer installed in each of the building out of the following :
 Topologies : Star Topology, Bus Topology
 Network Cable : Co-axial Cable, Ethernet Cable, Single Pair Telephone Cable.

19	Differentiate between communication using Optical Fiber and Ethernet Cable in context of wired medium of communication technologies.
20	Janish Khanna used a pen drive to copy files from his friend's laptop to his office computer. Soon his computer started abnormal functioning. Sometimes it would restart by itself and sometimes it would stop different applications running on it. Which of the following options out of (i) to (iv), would have caused the

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	<p>malfunctioning of the computer ? Justify the reason for your chosen option :</p> <ul style="list-style-type: none">(i) Computer Virus(ii) Spam Mail(iii) Computer Bacteria(iv) Trojan Horse
21	<p>Ms. Raveena Sen is an IT expert and a freelancer. She recently used her skills to access the Admin password for the network server of Super Dooper Technology Ltd. and provided confidential data of the organization to its CEO, informing him about the vulnerability of their network security. Out of the following options (i) to (iv), which one most appropriately defines Ms. Sen ?</p> <p>Justify the reason for your chosen option :</p> <ul style="list-style-type: none">(i) Hacker(ii) Cracker(iii) Operator(iv) Network Admin
22	<p>Hi Standard Tech Training Ltd. is a Mumbai based organization which is expanding its office set-up to Chennai. At Chennai office compound, they are planning to have 3 different blocks for Admin, Training and Accounts related activities. Each block has a number of computers, which are required to be connected in a network for communication, data and resource sharing.</p> <p>As a network consultant, you have to suggest the best network related solutions for them for issues/problems raised by them in (i) to (iv), as per the distances between various blocks/locations and other given parameters.</p>

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Shortest distances between various blocks/locations :

Admin Block to Accounts Block	300 Metres
Accounts Block to Training Block	150 Metres
Admin Block to Training Block	200 Metres
MUMBAI Head Office to CHENNAI Office	1300 Km

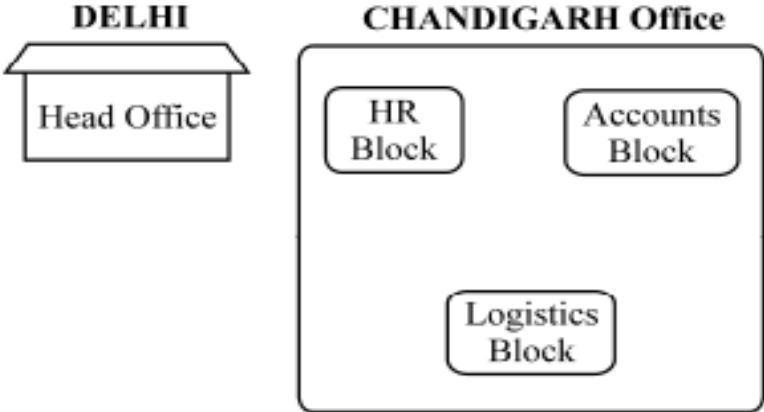
Number of computers installed at various blocks are as follows :

Training Block	150
Accounts Block	30
Admin Block	40

- (i) Suggest the most appropriate block/location to house the SERVER in the CHENNAI office (out of the 3 blocks) to get the best and effective connectivity. Justify your answer.
- (ii) Suggest the best wired medium and draw the cable layout (Block to Block) to efficiently connect various blocks within the CHENNAI office compound.
- (iii) Suggest a device/software and its placement that would provide data security for the entire network of the CHENNAI office.
- (iv) Suggest a device and the protocol that shall be needed to provide wireless Internet access to all smartphone/laptop users in the CHENNAI office.

23 Differentiate between Radio Link and Microwave in context of wireless communication technologies.

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24	<p>Amit used a pen drive to copy files from his friend's laptop to his office computer. Soon his office computer started abnormal functioning. Sometimes it would restart by itself and sometimes it would stop functioning totally. Which of the following options out of (i) to (iv), would have caused the malfunctioning of the computer ? Justify the reason for your chosen option : 2</p> <p>(i) Computer Worm (ii) Computer Virus (iii) Computer Bacteria (iv) Trojan Horse</p>
25	<p>Jai is an IT expert and a freelancer. He recently used his skills to access the Administrator password for the network server of Megatech Corpn Ltd. and provided confidential data of the organization to its Director, informing him about the vulnerability of their network security. Out of the following options (i) to (iv), which one most appropriately defines Jai ? 2</p> <p>Justify the reason for your chosen option :</p> <p>(i) Hacker (ii) Cracker (iii) Operator (iv) Network Admin</p>
26	<p>Hi Speed Technologies Ltd. is a Delhi based organization which is expanding its office setup to Chandigarh. At Chandigarh office campus, they are planning to have 3 different blocks for HR, Accounts and Logistics related work. Each block has number of computers, which are required to be connected in a network for communication, data and resource sharing.</p> <p>As a network consultant, you have to suggest the best network related solutions for them for issues/problems raised in (i) to (iv), keeping in mind the distances between various blocks / locations and other given parameters.</p> <div style="text-align: center;"><p>DELHI</p></div>

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Shortest distances between various blocks/locations :

HR Block to Accounts Block	400 metres
Accounts Block to Logistics Block	200 metres
Logistics Block to HR Block	150 metres
DELHI Head Office to CHANDIGARH Office	270 km

Number of Computers installed at various blocks are as follows :

HR Block	70
Accounts Block	50
Logistics Block	40

- (i) Suggest the most appropriate block/location to house the SERVER in the CHANDIGARH Office (out of the 3 blocks) to get the best and effective connectivity. Justify your answer. **1**
- (ii) Suggest the best wired medium and draw the cable layout (Block to Block) to efficiently connect various Blocks within the CHANDIGARH office compound. **1**
- (iii) Suggest a device / software and its placement that would provide data security for the entire network of CHANDIGARH office. **1**
- (iv) Which of the following kind of network, would it be ? **1**
- (a) PAN
(b) WAN
(c) MAN
(d) LAN


27 Identify the type of topology on the basis of the following:
a. Since every node is directly connected to the server, a large amount of cable is needed which increases the installation cost of the network.
b. It has a single common data path connecting all the nodes.

Ans a. Star Topology
b. Bus Topology

28 Expand the following:
a. VOIP
b. SMTP

Ans a. Voice Over Internet Protocol

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Worksheet 4- Computer Networks

	b. Simple Mail Transfer Protocol												
29	Who is a hacker?												
Ans	A computer enthusiast, who uses his computer programming skills to intentionally access a computer without authorization is known as hacker. A hacker accesses the computer without the intention of destroying data or maliciously harming the computer.												
30	The following is a 32 bit binary number usually represented as 4 decimal values, each representing 8 bits, in the range 0 to 255 (known as octets) separated by decimal points. 140.179.220.200 What is it? What is its importance?												
Ans	It is an IP Address. It is used to identify the computers on a network.												
31	Daniel has to share the data among various computers of his two offices branches situated in the same city. Name the network (out of LAN, WAN, PAN and MAN) which is being formed in this process.												
Ans	MAN												
32	<p>Rehaana Medicos Center has set up its new center in Dubai. It has four buildings as shown in the diagram given below:</p>  <p>The diagram shows four pentagonal buildings arranged in a square pattern. The top-left building is labeled 'Accounts', the top-right is 'Research Lab', the bottom-left is 'Store', and the bottom-right is 'Packaging Unit'.</p> <p>Distances between various buildings are as follows:</p> <table border="1"> <tbody> <tr> <td>Accounts to Research Lab</td> <td>55 m</td> </tr> <tr> <td>Accounts to Store</td> <td>150 m</td> </tr> <tr> <td>Store to Packaging Unit</td> <td>160 m</td> </tr> <tr> <td>Packaging Unit to Research Lab</td> <td>60 m</td> </tr> <tr> <td>Accounts to Packaging Unit</td> <td>125 m</td> </tr> <tr> <td>Store to Research Lab</td> <td>180 m</td> </tr> </tbody> </table>	Accounts to Research Lab	55 m	Accounts to Store	150 m	Store to Packaging Unit	160 m	Packaging Unit to Research Lab	60 m	Accounts to Packaging Unit	125 m	Store to Research Lab	180 m
Accounts to Research Lab	55 m												
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Packaging Unit to Research Lab	60 m												
Accounts to Packaging Unit	125 m												
Store to Research Lab	180 m												

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Number of Computers

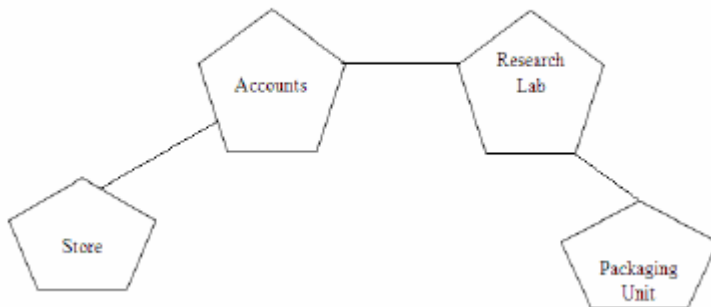
Accounts	25
Research Lab	100
Store	15
Packaging Unit	60

As a network expert, provide the best possible answer for the following queries:

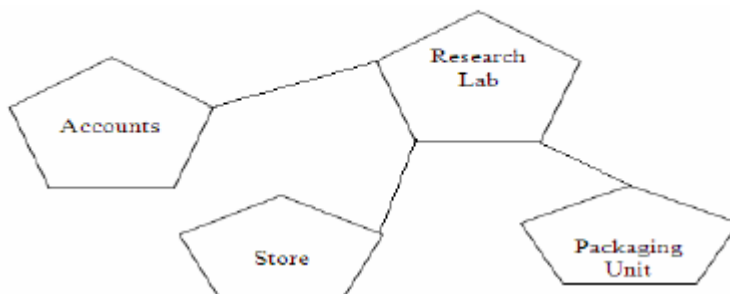
- i) Suggest a cable layout of connections between the buildings.
- ii) Suggest the most suitable place (i.e. buildings) to house the server of this organization.
- iii) Suggest the placement of the following device with justification:
a) Repeater b) Hub/Switch
- iv) Suggest a system (hardware/software) to prevent unauthorized access to or from the network.

Ans

(i) Layout 1

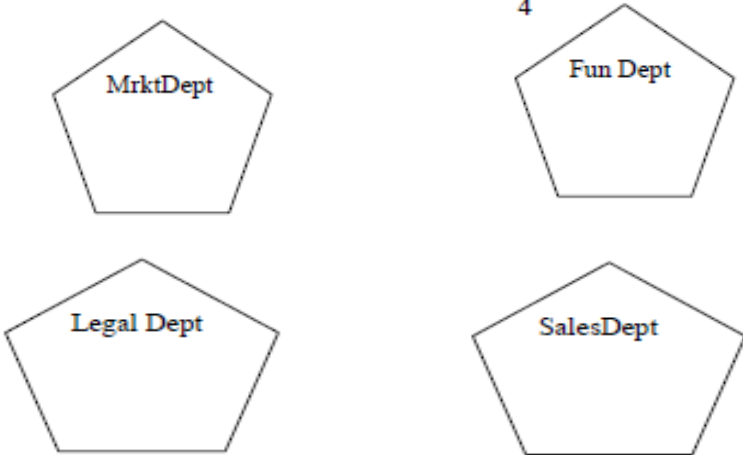


Layout 2



(ii) The most suitable place/ building to house the server of this

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Worksheet 4- Computer Networks

	<p>organization would be building Research Lab, as this building contains the maximum number of computers.</p> <p>(iii)</p> <p>a) For layout1, since the cabling distance between Accounts to Store is quite large, so a repeater would ideally be needed along their path to avoid loss of signals during the course of data flow in this route. For layout2, since the cabling distance between Store to Recresearch Lab is quite large, so a repeater would ideally be placed.</p> <p>b) In both the layouts, a Hub/Switch each would be needed in all the buildings to interconnect the group of cables from the different computers in each building.</p> <p>(iv) Firewall</p>
33	Write any 1 advantage and 1 disadvantage of Bus topology.
Ans	<p>Ans: Advantage: Since there is a single common data path connecting all the nodes, the bus topology uses a very short cable length which considerably reduces the installation cost.</p> <p>Disadvantage: Fault detection and isolation is difficult. This is because control of the network is not centralized in any particular node. If a node is faulty on the bus, detection of fault may have to be performed at many points on the network. The faulty node has then to be rectified at that connection point.</p>
34	<p>b. SunRise Pvt. Ltd. is setting up the network in the Ahmadabad. There are four departments named as MrktDept, FunDept, LegalDept, SalesDept.</p> <p align="center">4</p>  <p>The diagram shows four pentagonal nodes arranged in a 2x2 grid. The top-left node is labeled 'MrktDept', the top-right node is labeled 'Fun Dept', the bottom-left node is labeled 'Legal Dept', and the bottom-right node is labeled 'SalesDept'. There are no lines connecting the nodes, indicating a standalone network configuration.</p>

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Distance between various buildings is as given:

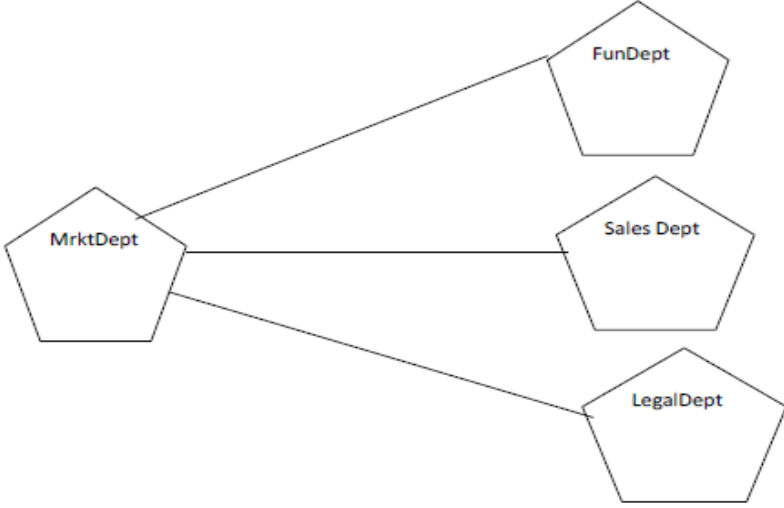
MrktDept to FunDept	80 m
MrktDept to LegalDept	180m
MrktDept to SalesDept	100 m
LegalDept to SalesDept	150 m
LegalDept to FunDept	100 m
FunDept to SalesDept	50 m

Number of Computers in the buildings:

MrktDept	20
LegalDept	10
FunDept	08
SalesDept	42

- i) Suggest a cable layout of connections between the Departments and specify topology.
- ii) Suggest the most suitable building to place the server a suitable reason with a suitable reason.
- iii) Suggest the placement of i) modem ii) Hub /Switch in the network.
- iv) The organization is planning to link its sale counter situated in various part of the same city/ which type of network out of LAN, WAN, MAN will be formed? Justify.

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<p>Ans</p>	<p>i) Suggest a cable layout of connections between the Departments and specify topology.</p>  <pre> graph LR MrktDept --- FunDept MrktDept --- SalesDept SalesDept --- LegalDept </pre> <p>Star Topology should be used. Ans: As per 80 – 20 rule, MrktDept because it has maximum no. of computers. Ans: Each building should have hub/switch and Modem in case Internet connection is required. MAN (Metropolitan Area Network)</p>
<p>35</p>	<p>c.Name the protocol 1 i. Used to transfer voice using packet switched network. [1 mark for the correct Answer] ii.Used for chatting between 2 groups or between 2 individuals.</p>
<p>Ans</p>	<p>Ans: VOIP (Voice Over Internet Protocol) Ans: IRC(Internet Relay Chat)</p>
<p>36</p>	<p>What is an IP Address?</p>
<p>Ans</p>	<p>An IP address is a unique identifier for a node or host connection on an IP network. An IP address is a 32 bit binary number usually represented as 4 decimal values, each representing 8 bits, in the range 0 to 255 (known as octets) separated by decimal points. This is known as "dotted decimal" notation. Example:140.179.220.200</p>
<p>37</p>	<p>What is HTTP?</p>
<p>Ans</p>	<p>Solution: HTTP is a protocol that is used for transferring hypertext(i.e. text,graphic,image,sound,video,etc,)between 2 computers and is particularly used on the Worldd</p>

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	Wide Web (WWW).
38	Explain the importance of Cookies.
Ans	Ans : When the user browses a website, the web server sends a text file to the web browser. This small text file is a cookie. They are usually used to track the pages that we visit so that information can be customised for us for that visit.
39	How is 4G different from 3G?
Ans	Ans: 3G technology adds multimedia facilities such as video, audio and graphics applications whereas 4G will provide better than TV quality images and video-links.