



Examination Answer Book

12 Pages

Instructions to candidates

1. Please give the information requested in the boxes below.
2. Enter you name in the space provided to the right and seal to hide your name.
3. The answers must be **legibly** written. The Examiners can either ignore illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.

1	Student Number	1302188
2	Title of Examination Paper	Local Area Nebarc 12
3	Module Code	Acec 5002
4	Date and Time of Examination	09-05-2016 2:00 Pm
5	Examination Venue	LH13
6	Seat Number	6
7	Number of Answer Books handed in	

List the numbers of the questions you have attempted	Office Use
1	15
2	4
3	3
Total	22/75

29%

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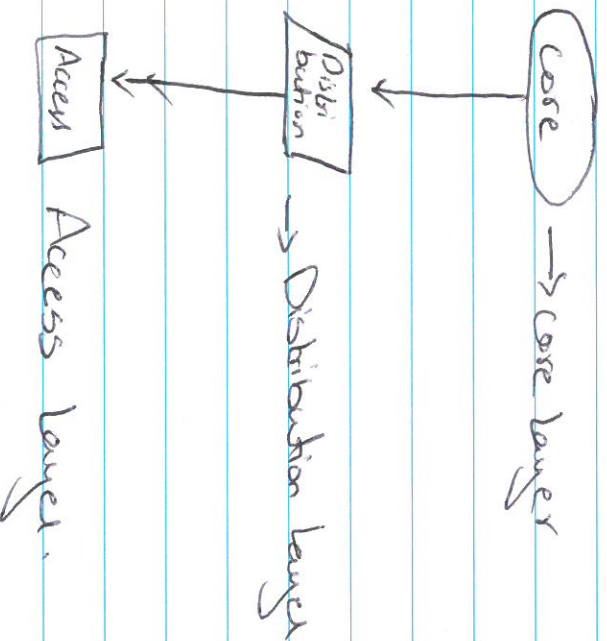
PULL & TEAR

Question 1

(a)

There is ~~the~~ Three types of layers in hierarchical Network design.

- core
- distribution
- Access



cases:-

core layers:

It is the main core of Network
It acts the data from ISP.

Aggregation of DS. layer
- high speed with high

Distribution layer:

It distributes the data

all over the Network which is interconnected
to each other on LAN.

Aggregates Acc. layer, traffic
interconnection
Policy implementation

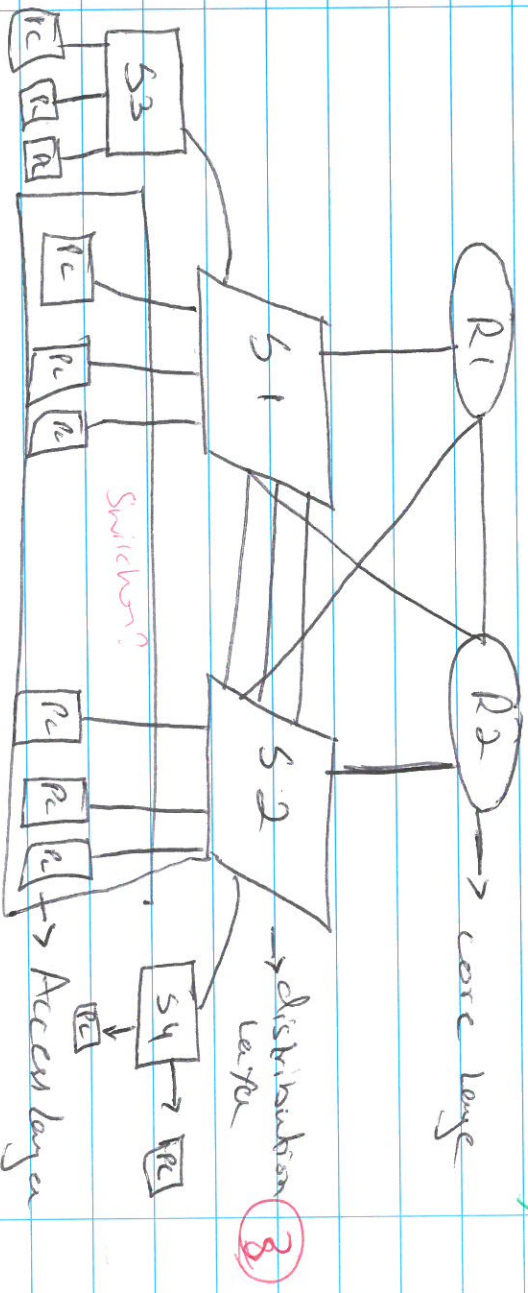
(1)

(2)

Access layer-

Access layer where the end devices will be connected to access the data which send by the distribution layer.

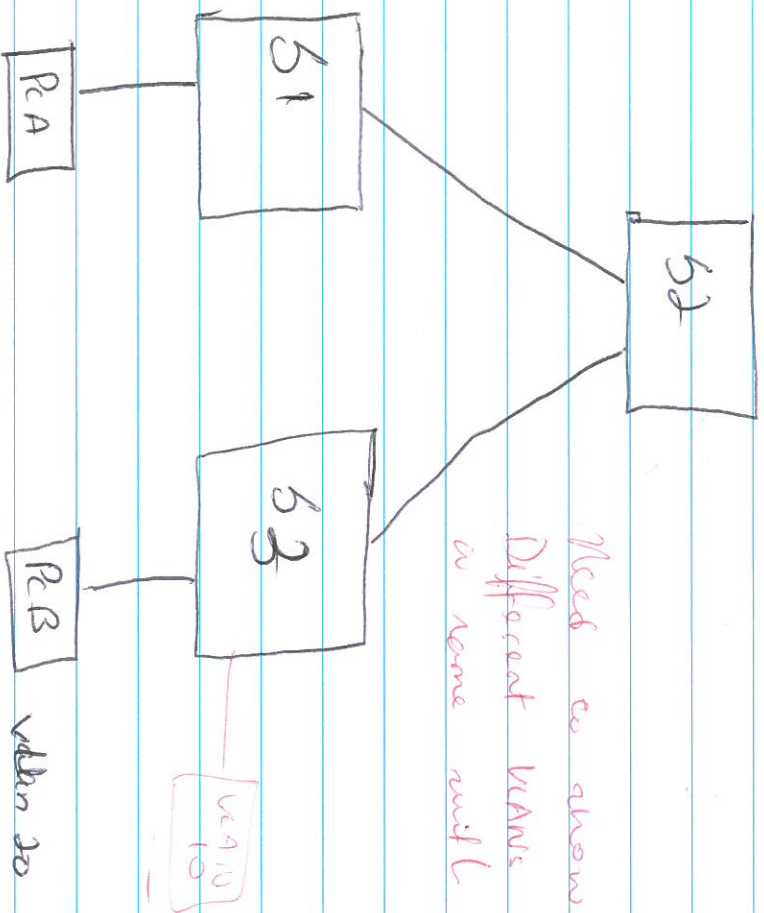
Example



As shown in the diagram all end devices connected to the switches which is distribution layer and all switches connected to the Router in core layer to Access the data from ISP.

(B)

VLANs



(2)

Two ~~communicate~~ on diff. hosts

Hosts configured on different network to communicate between them. VLAN configuration is being used. In Diagram Above both hosts are configured on different VLAN. Trunking protocol is being used between them.

Benefits of VLANs.

Speed
one of the benefit of VLAN is Speed

There is four types of VLANs.

Q

- Data VLAN
- Native VLAN
- Management VLAN
- Auto VLAN

• Data VLAN:-

used to transfer data traffic between Network hosts. It best practice to differentiate between voice and data traffic.

• Native VLAN:-

Native VLAN is default default VLAN. After bootup, Native VLAN is named as ~~VLAN~~ VLAN 1. After bootup VLAN one cannot be deleted, or Renamed.

Q

• Management VLAN:-

Management VLAN is configured on Management hosts. Those who can change the configuration on VLANs.

• Auto VLAN:-

Auto VLAN is automatically set configured to the hosts after bootup.

Benefits of VLAN:-

- Scalability
- Modularity
- Security
- Speed *performance*

(3)

Q (2) (b)

VTP Server:-

VTP Server can be used to configure configured Domains on all VLANs Attached to that Network. VLANs can be created, deleted or renamed from VTP server. Data stored in NVRAM on VTP server so every time its reset Need to be configured again.

(2)

VTP Client:-

VTP client gets the VLAN information from VTP server. VLAN cannot be created or Renamed from VTP client. It can only be created on VTP server. Data stored in RAM on VTP client so it will be deleted when ever it restarts.

Should mention it acts like VTP Sw. in that it forwards adv.

(1)

VTP Pruning:-

VTP Pruning is used to stop flooding of MAC address on VTP Server and clients.

More detailed & accurate
Description required.

VTP Domain:-

VTP Domain is used to issue a Domain names to All clients. No when information can be changed & on VTP Domain it stores data on RAM on Restart data will be deleted VLAN configuration only be changed locally on device.

(3) (b)

• Both switches should be same on Same speed.

• Both switches should be on same VLAN.

• ~~only 8 ports can be used to form etherchannel~~

• Both switch should be on Same duplex mode.

• ~~configuration should be same~~

Q4(c)

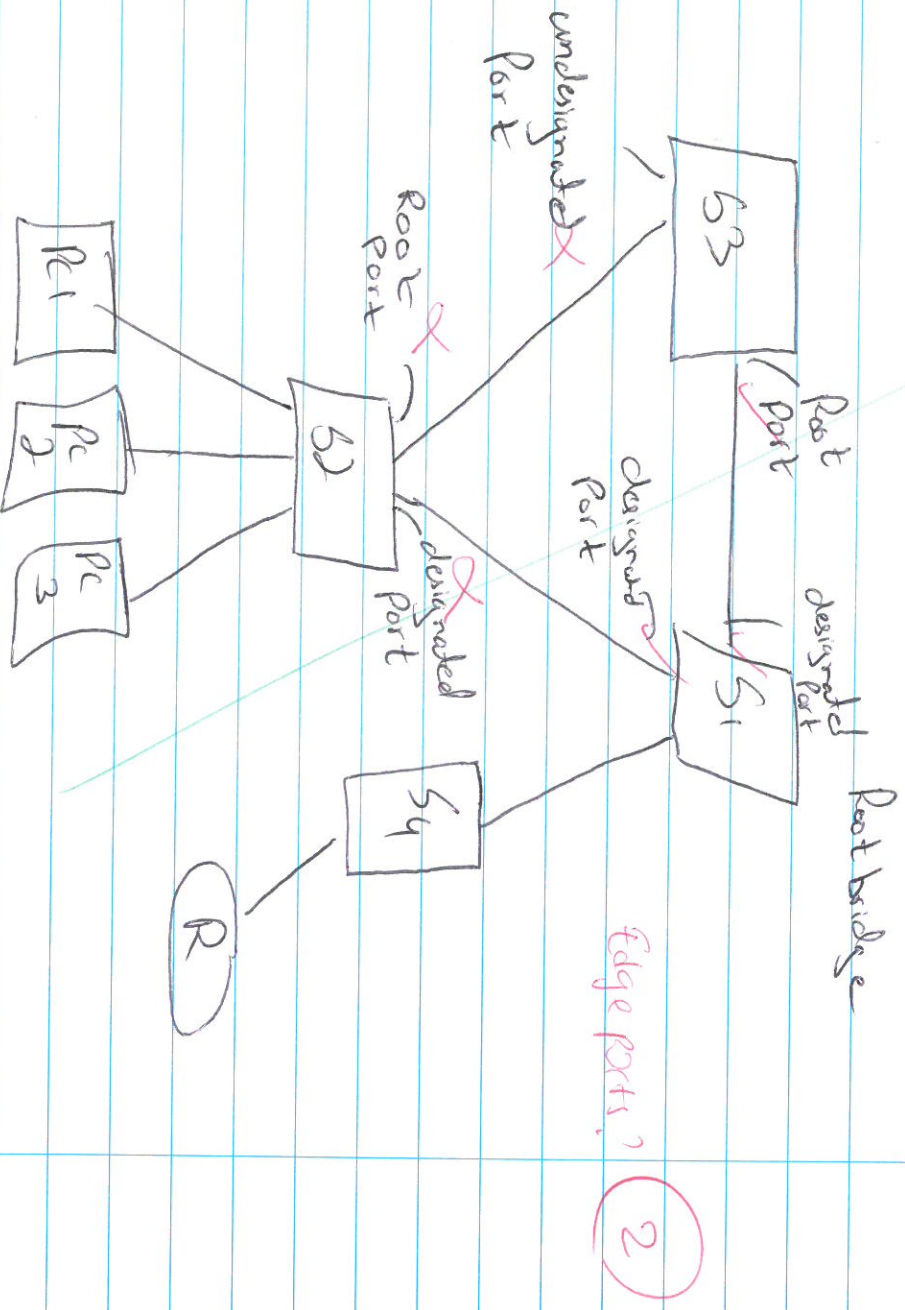
DHCP Requests from hosts 1 keep failing
 Maybe because Ports are in blocked state or link between gateway and switch maybe down. one thing can be done interconnect both switches and Make it as a trunk and Make Trunk between switches and gateway also. If it didn't work then use Show commands.

IP-HELPER

only

(b)

Answer
 After



As you seen in diagram there is one

Root Port on every switch and S₁ is a Root bridge there is one designated Port which is in blocking state so data will be transfer through Root bridge to S₃ because Port from S₂ to S₃ is in blocking state.