



12 Pages

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FORENAME(S): Mohammad

1	Student Number	1303749
2	Title of Examination Paper	Wide Area Net work
3	Module Code	CSAC6002- LON
4	Date and Time of Examination	12/01/18 10:00 - 12:00
5	Examination Venue	LH-2
6	Seat Number	13 14
7	Number of Answer Books handed in	

List the numbers of the questions you have attempted	Office Use
1	6
3	5
4	6
Office Use	17/75

 23^6

Answer to the question no:1Introduction:

Nowadays internet has been used widely to connect us devices for communication. WAN technologies spread this connection to vast media. WAN technology is most commonly used in LAN where different media used such as. DSL, Cable Modem, 3G/4G, VSAN, Metropolitan Ethernet.

DSL :

DSL technology makes and ease the distance of communication. Wherever the branch or office located geographically such as multinational company like Google's head quarte is in US and it has branches in london. Such kind of connection is made by the DSL.

DSL connection communicates with Internet Service provider (ISP) and ISP creates secure connection for the user.

DSL modem is established to connect to the ISP where gateway and addresses are set up for privacy.

(ii) Cable Modem:

WAN technologies are used to connect Internet by cable Modem. Business grows and needs to extend connection. During first small office cable modem is used to connect to the internet. Business can be a bit grower where it has some branches in that case cable Modem helps to connect between branches.

To establish the connection a modem is used to secure the connection line. Doesn't answer question!

(iii) 3G/4G

3G/4G is a m, the most popular WAN technology used by a large number of people. Almost every single person uses the cell phone and connect to the internet. Due to the develop of technology, 3G/4G can be found most of the location. Smartphone or Laptop/PC also can be connected through this network. 2

In terms of 3G is less spread connection and bandwidth than 4G network. May third world countries 3G is the primary internet connection for communication. ✓

(iv) VSAT

Very small aperture terminology is a connection of internet which is used in very small network topology. It is very useful within the same place of all devices to be connected.

(v) Metropolitan Ethernet:

Metropolitan ethernet is the satellite internet to any isolated area where DSL, cable or other connection is not established.

Compared to other types of internet connection satellite connection is much expensive to set up and use.

An antenna is hanged on the roof or top of place to connect to a modem inside the building where connection can be monitored.

All wrong!

3

Answer to the question no. 3

(a) Wireless technology is has is being popular significantly in WAN technology. There are three types of wireless technology which can be deployed in WAN.

Wi-Fi: Wi-Fi is the most useful technology which is used in WAN technology. Wi-Fi is cheaper than other types of wireless connection.

WiMax: WiMax is being popular in many cities however, due to high connection cost it is less used to the public.

(b) In figure 5 and 6, BGP connection is set up between company A and ISP-1.

Company A created bgp router 65000 connection for ISP and also publish its neighbor address or including subnet mask.

ISP-1 creates a secure connection with the company A addressing neighbor and network address.

Answer to the question no: 4

(a) Cyber attack is the primary thread for the WAN Network. The most common security attacks considers to be following.

- Dos attacks
- Virus and Malware
- Hacking
- Network poisoning

✓
✓
✓
✓

4

(b) There are many types of security attacks which a network is becomes under threat and weakens connections.

1. Dos attack
2. Hacking

✓

✓

2