**DV162\_14\_PAS on video related to TCP/IP Protocol Suites**

**Possible Answers Sheet**

Q1.1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is one of the main protocol in TCP/IP network.

A1.1 Transmission Control Protocol.

Q1.2 TCP/IP is a connection-oriented protocol, which basically means that it must first acknowledge a session between the two computers that are\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A1.2. Communicating.

Q2. The two computers in a connection-oriented protocol verify a connection before any communication takes place using a \_\_\_\_\_\_\_\_ handshake.

A2. Three-way.

Q3. What is the first step in connection-oriented protocol?

A3. The first step is that a computer will send a message called a SYN.

Q4. The computer which received\_\_\_\_\_\_\_\_\_\_\_, will send back an acknowledgement message telling the sender that it has received the message

A4. SYN.

Q5. Does TCP guarantee the delivery of the data.?

A5. Yes, TCP guarantees the delivery of the data.

Q6. What will happen if a data packet goes astray and doesn't arrive?

A6. TCP will resend it.

Q7. UDP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A7. User Datagram Protocol.

Q8. What is the main difference between UDP and TCP?

A8. UDP is connection-less and does not guarantee data delivery, while TCP is connection-oriented and guarantees delivery.

Q9. UDP does establish a session and it does guarantee data delivery. (True/False)

A9. True.

Q10. Why UDP is known as the "fire-and-forget" protocol?

A10. UDP is known as the "fire-and-forget" protocol because it sends data without caring if it is received at the other end.

Q11. Why is UDP faster than TCP?

A11. UDP is faster than TCP because it has less overhead since it does not guarantee data delivery.

Q12. \_\_\_\_\_\_\_\_\_\_\_\_ doesn't really care if the data is received at the other end.

A12. UDP.

Q13. FTP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_and this is a standard protocol that is used by web users to upload and download files between computers through the internet.

A13. File Transfer Protocol.

Q14. If a user wants to make their file suitable to download to other users all they what have to do simply upload their files to a FTP server and then a user can simply download them. (True/False)

A14. True.

Q15. FTP is a connection-oriented protocol. That uses \_\_\_\_\_\_\_\_\_\_\_for file transfer.

A15. TCP.

Q16.1. TFTP stands for\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It's mainly used for transferring files within a same network.

A16.1. Trivial File Transfer Protocol.

Q16.2 Which protocol is used by TFTP to transfer data.

A16.2 TFTP uses UDP to transfer Data.

Q17.1 . SFTP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A17.1 Secure File Transfer Protocol.

Q17.2  Secure FTP is just like FTP except that it adds a layer of security.[True /False]

A17.2 True.

Q17.3 The data using Secure FTP is actually \_\_\_\_\_\_\_ using secure shell during data transfer.

A17.3 Encrypted.

Q17.4 You may send no sensitive data like passwords are sent includes text.(True/False)

A17. False.

Q18.1. SMTP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_And this you might guess is the protocol that is used sent emails.

A18.1. Simple Mail Transfer Protocol.

Q18.2 A good way to remember SMTP is by looking at the acronym as SMTP and translating that to sending \_\_\_\_\_\_\_\_\_\_\_\_\_to people.

A18.2 Sending Main To People.

Q18.3 It uses \_\_\_\_\_\_\_\_ protocol.

A18.3 SMTP uses TCP protocol.

Q19. The main characteristics about POP3 is that all it does is just grab the email from the mail server and downloads the email to your computer. It does not sync any email or folders from the mail servers and your computer like I-map4 does. (True/False)

A19. True.

Q20.1. POP 3 strictly downloads the email and typically when your email application using POP3 retrieve the\_\_\_\_\_\_\_\_\_.

A20.1 Mail Server.

Q20.2 The email is removed from the mail server unless you specified in your email application to keep a \_\_\_\_\_\_\_\_\_\_\_of a mail server

A20.2. Copy.

Q21.1 SNMP is called \_\_\_\_\_\_\_\_\_\_\_\_\_protocol

A21.1 Simple Network Management Protocol.

Q21.2 SNMP protocol used for \_\_\_\_\_\_\_ management.

A21.2 Network.

Q21.3 SNMP is basically used for \_\_\_\_\_\_\_\_\_from various network devices such as routers, printers and servers.

A21.3 Collecting Data.

Q22.1 SCP stands for\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A22.1 Secure Copy Protocol.

Q22.2 SCP protocol is simply used for secure shell to \_\_\_\_\_\_\_\_\_\_\_data as it’s being transferred over a network.

A22.2 Securely Transferring.

Q23.1 RARP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_

A23.1 Reverse Address Resolution Protocol.

Q23.2 As you might guess RARP is just the opposite of ARP. It’s used to resolve \_\_\_\_\_\_ addresses to \_\_\_\_\_\_ addresses.

A23.2, MAC, IP.

Q24.1 NTP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_.

A24.1 Network Type Protocol.

Q24.2 NTP is an internet standard that is used to synchronize the clocks of the computers with U.S. Naval Observatory Master Clock. (True/False)

A24.2 True.

Q25. NTP protocols runs on each computer and it sends a periodic requests to the server to make sure the time is in \_\_\_\_\_\_\_\_\_.

A25. Sync.

Q26.1 IMAP is another protocol and it stands for \_\_\_\_\_\_\_\_\_\_\_.

A26.1 Internet Message Access Protocol.

Q26.2 IMAP is used for receiving email. IMAP4 is similar to POP3 because they both use for \_\_\_\_\_\_\_\_from the mail server.

A26.2 Retrieving Emails.

Q26.3 But IMAP4 has better features than POP3 [True / False].

A26.3 True.

Q27. With IMAP4 you can access or manage your email on the server from your local computer. So if you want to read your email and keep a copy of it on your server, IMAP 4 allow you to do it. (True/False)

A27. True.

Q28.1 Unlike POP3, IMAP4 syncs your email and your email folders from the mail server with your computer.[True / False]

A28.1 True.

Q28.2 \_\_\_\_\_is also commonly used with Microsoft outlook.

A28.2 IMAP4.

Q29.1 HTTP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A29.1 Hypertext transfer protocol.

Q29.2 HTTP is probably the most widely used protocol in the world today and it is the protocol that is used for viewing \_\_\_\_\_\_\_\_\_\_on the internet.

A29.2 Web pages.

Q30. SSH stands for \_\_\_\_\_\_\_\_\_\_\_ is a better alternative to telnet. It protects the data of7 being \_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_ as of being transferred over network.

A30. Secure Shell, attacked, stolen.

Q31. If you are sending a sensitive data like a login or password, a potential hacker could be listening and steal the data and that the reason for the secure shell. Secure shell acts like a secure tunnel that form around the data transferred and protects it from data threats. (True/False)

A31. True.

Q32. ARP stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_. And this is protocol that is used to resolve IP addresses to MAC addresses. When a computer needs to communicate with another computer on the network it needs a \_\_\_\_\_\_\_\_\_address for that computer.

A32. Address Resolution Protocol, MAC.

Q33. ARP communication will take place, if the targeted computer’s IP address already has a MAC address in its table. if it doesn’t it will send out a broadcasts message out on a network asking which computer has the IP address. The matching IP address will respond back informing that it has IP its looking for. Then the original computer will ask for Mac address and once it receives it the communication will take place. (True/False)

A33. True.

Q34. Telnets is a terminal emulation program that is used to access\_\_\_\_\_\_\_\_\_\_. It is a simple tool that runs on computer when you allow to run commands remotely, it sends commands not graphics makes it fast. But Telnet is not secure as it sends data in \_\_\_\_\_\_\_\_\_.

A34. Remote Servers, clear text.

Q35. HTTPS stands for\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. And this is HTTP with a security feature. HTTPS \_\_\_\_\_\_\_\_\_\_\_\_ the data that is being retrieved by HTTP.

A35. Hypertext Transfer Protocol Secure, Encrypts.

Q36. The ‘s’ added to http in the web URL indicates that you are using HTTPS and have enter a secure website where sensitive data is going to be passed and protected. (True/False)

A36. True.