A bastion host is a special purpose computer on a network specifically designed and configured to withstand attack. The computer hosts a single application, for example a proxy server, and all other services are removed or limited to reduce the threat to the computer. It is hardened in this manner primarily due to its location and purpose, which is either on the outside of the firewall or in the DMZ and usually involves access from untrusted networks or computers. References:

http://en.wikipedia.org/wiki/Bastion_host

QUESTION 823

Which xDSL flavour, appropriate for home or small offices, delivers more bandwidth downstream than upstream and over longer distance?

- A. VDSL
- B. SDSL
- C. ADSL
- D. HDSL

Correct Answer: C **Explanation:**

Asymmetric digital subscriber line (ADSL) is designed to provide more bandwidth downstream (1 to 8 Mbps) than upstream (16 to 800Kb). DSL (Digital Subscriber Line) is a modem technology for broadband data access over ordinary copper telephone lines (POTS) from homes and businesses. xDSL refers collectively to all types of DSL, such as ADSL (and G.Lite), HDSL, SDSL, IDSL and VDSL etc. They are sometimes referred to as last-mile (or first mile) technologies because they are used only for connections from a telephone switching station to a home or office, not between switching stations.

xDSL is similar to ISDN in as much as both operate over existing copper telephone lines (POTS) using sophisticated modulation schemes and both require the short runs to a central telephone office

Graphic below from: http://computer.howstuffworks.com/vdsl3.htm

DSL Type	Max. Send Speed	Max. Receive Speed	Max. Distance	Lines Required	Phone Support
ADSL	800 Kbps	8 Mbps	18,000 ft (5,500 m)	1	Yes
HDSL	1.54 Mbps	1.54 Mbps	12,000 ft (3,650 m)	2	No
IDSL	144 Kbps	144 Kbps	35,000 ft (10,700 m)	1	No
MSDSL	2 Mbps	2 Mbps	29,000 ft (8,800 m)	1	No
RADSL	1 Mbps	7 Mbps	18,000 ft (5,500 m)	1	Yes
SDSL	2.3 Mbps	2.3 Mbps	22,000 ft (6,700 m)	1	No
VDSL	16 Mbps	52 Mbps	4,000 ft (1,200 m)	1	Yes

DSL speed chart

The following are incorrect answers:

Single-line Digital Subscriber Line (SDSL) deliver 2.3 Mbps of bandwidth each way. High-rate Digital Subscriber Line (HDSL) deliver 1.544 Mbps of bandwidth each way.

Very-high data-rate Digital Subscriber Line (VDSL) can deliver up to 52 Mbps downstream over a single copper twisted pair over a relatively short distance (1000 to 4500 feet).

Reference used for this question:

http://computer.howstuffworks.com/vdsl3.htm http://www.javvin.com/protocolxDSL.html

KRUTZ, Ronald L.& VINES, Russel D., The CISSP Prep Guide: Mastering the Ten Domains of Computer Security, John Wiley & Sons, 2001, Chapter 3: Telecommunications and Network Security (page 115).

QUESTION 824

What is a packet sniffer?

- A. It tracks network connections to off-site locations.
- B. It monitors network traffic for illegal packets.
- C. It scans network segments for cabling faults.
- D. It captures network traffic for later analysis.

Correct Answer: D **Explanation**:

Source: TIPTON, Hal, (ISC)2, Introduction to the CISSP Exam presentation.

QUESTION 825

Which of the following access methods is used by Ethernet?

- A. CSMA/CD.
- B. CSU/DSU.
- C. TCP/IP.
- D. FIFO.

Correct Answer: A

Explanation:

Ethernet uses Carrier Sense Multiple Access with Collision Detection (CSMA/CD) to minimize the effect of broadcast collisions.

The following answers are incorrect:

CSU/DSU Is incorrect because Channel Service Unit/Digital Service Unit(CSU/DSU) is a digital interface normally used to connect a router to a digital circuit.

TCP/IP Is incorrect because Transmission Control Protocol/Internet Protocol(TCP/IP) is a network protocol not an access method.

FIFO Is incorrect as it is a distractor. First In, First Out (FIFO) is typically a processing methodology in which first come, first served. Ethernet is a frame based network technology.

References:

OIG CBK Telecommunications and Network Security (pages 437 - 438) Wikipedia http://en.wikipedia.org/wiki/FIFO

QUESTION 826

Which of the following is NOT an advantage that TACACS+ has over TACACS?

- A. Event logging
- B. Use of two-factor password authentication
- C. User has the ability to change his password
- D. Ability for security tokens to be resynchronized

Correct Answer: A

Explanation:

Although TACACS+ provides better audit trails, event logging is a service that is provided with TACACS.

Source: KRUTZ, Ronald L.& VINES, Russel D., The CISSP Prep Guide: Mastering the Ten Domains of Computer Security, John Wiley & Sons, 2001, Chapter 3: Telecommunications and Network Security (page 121).

QUESTION 827

Why does fiber optic communication technology have significant security advantage over other transmission technology?

- A. Higher data rates can be transmitted.
- B. Interception of data traffic is more difficult.
- C. Traffic analysis is prevented by multiplexing.
- D. Single and double-bit errors are correctable.

Correct Answer: B Explanation:

It would be correct to select the first answer if the world "security" was not in the question.

Source: TIPTON, Hal, (ISC)2, Introduction to the CISSP Exam presentation.

QUESTION 828

Which of the following is an IP address that is private (i.e. reserved for internal networks, and not a valid address to use on the Internet)?

- A. 172.12.42.5
- B. 172.140.42.5
- C. 172.31.42.5
- D. 172.15.42.5

Correct Answer: C **Explanation**:

This is a valid Class B reserved address. For Class B networks, the reserved addresses are 172.16.0.0 - 172.31.255.255.

The private IP address ranges are defined within RFC 1918:

RFC 1918 private ip address range

RFC 1918 Address Allocation for Private Internets February 1996

3. Private Address Space

The Internet Assigned Numbers Authority (IANA) has reserved the following three blocks of the IP address space for private internets:

```
10.0.0.0 - 10.255.255.255 (10/8 prefix)

172.16.0.0 - 172.31.255.255 (172.16/12 prefix)

192.168.0.0 - 192.168.255.255 (192.168/16 prefix)
```

The following answers are incorrect:

172.12.42.5 Is incorrect because it is not a Class B reserved address.

172.140.42.5 Is incorrect because it is not a Class B reserved address.

172.15.42.5 Is incorrect because it is not a Class B reserved address.

QUESTION 829

Which OSI/ISO layer does a SOCKS server operate at?

- A. Session layer
- B. Transport layer
- C. Network layer
- D. Data link layer

Correct Answer: A Explanation:

A SOCKS based server operates at the Session layer of the OSI model.

SOCKS is an Internet protocol that allows client-server applications to transparently use the services of a network firewall. SOCKS is an abbreviation for "SOCKetS". As of Version 5 of SOCK, both UDP and TCP is supported.

One of the best known circuit-level proxies is SOCKS proxy server. The basic purpose of the protocol is to enable hosts on one side of a SOCKS server to gain access to hosts on the other side of a SOCKS Server, without requiring direct "IP-reachability"

The protocol was originally developed by David Koblas, a system administrator of MIPS Computer Systems. After MIPS was taken over by Silicon Graphics in 1992, Koblas presented a paper on SOCKS at that year's Usenix Security Symposium and SOCKS became publicly available. The protocol was extended to version 4 by Ying-Da Lee of NEC.

SOCKS includes two components, the SOCKS server and the SOCKS client.

The SOCKS protocol performs four functions:

Making connection requests
Setting up proxy circuits
Relaying application data
Performing user authentication (optional)
Source:

KRUTZ, Ronald L.& VINES, Russel D., The CISSP Prep Guide: Mastering the Ten Domains of

SSCP Exam Dumps SSCP PDF Dumps SSCP VCE Dumps SSCP Q&As https://www.ensurepass.com/SSCP.html

Computer Security, John Wiley & Sons, 2001, Chapter 3: Telecommunications and Network Security (page 96).

http://en.wikipedia.org/wiki/SOCKS http://www.faqs.org/rfcs/rfc1928.html The ISC2 OIG on page 619

QUESTION 830

Which of the following protocols suite does the Internet use?

- A. IP/UDP/TCP
- B. IP/UDP/ICMP/TCP
- C. TCP/IP
- D. IMAP/SMTP/POP3

Correct Answer: C Explanation:

Transmission Control Protocol/Internet Protocol (TCP/IP) is the common name for the suite of protocols that was developed by the Department of Defense (DoD) in the 1970's to support the construction of the internet. The Internet is based on TCP/IP.

The Internet protocol suite is the networking model and a set of communications protocols used for the Internet and similar networks. It is commonly known as TCP/IP, because its most important protocols, the Transmission Control Protocol (TCP) and the Internet Protocol (IP), were the first networking protocols defined in this standard. It is occasionally known as the DoD model, because the development of the networking model was funded by DARPA, an agency of the United States Department of Defense.

TCP/IP provides end-to-end connectivity specifying how data should be formatted, addressed, transmitted, routed and received at the destination. This functionality has been organized into four abstraction layers within the DoD Model which are used to sort all related protocols according to the scope of networking involved.

From lowest to highest, the layers are:

The link layer, containing communication technologies for a single network segment (link).

The internet layer, connecting independent networks, thus establishing internetworking, The transport layer handling process-to-process communication, The application layer, which interfaces to the user and provides support services. The TCP/IP model and related protocols are maintained by the Internet Engineering Task Force (IETF).

The following answers are incorrect:

IP/UDP/TCP. This is incorrect, all three are popular protocol and they are not considered a suite of protocols.

IP/UDP/ICMP/TCP. This is incorrect, all 4 are some of the MOST commonly used protocol but they are not called a suite of protocol.

IMAP/SMTP/POP3. This is incorrect because they are all email protocol and consist of only a few of the protocol that would be included in the TCP/IP suite of protocol.

Reference(s) used for this question: