

1. What application layer protocol is commonly used to support for file transfers between a client and a server?  
HTML  
HTTP  
**FTP**  
Telnet
2. What are two forms of application layer software? (Choose two.)  
**applications**  
dialogs  
requests  
**services**  
syntax
3. A network administrator is designing a network for a new branch office of twenty-five users. What are the advantages of using a client-server model? (Choose two.)  
**centralized administration**  
does not require specialized software  
**security is easier to enforce**  
lower cost implementation  
provides a single point of failure
4. What is the purpose of resource records in DNS?  
temporarily holds resolved entries  
**used by the server to resolve names**  
sent by the client to during a query  
passes authentication information between the server and client
5. What is the automated service that matches resource names with the required IP address?  
HTTP  
SSH  
FQDN  
**DNS**  
Telnet  
SMTP
6. What three protocols operate at the Application layer of the OSI model? (Choose three.)  
ARP  
**DNS**  
PPP  
**SMTP**  
**POP**  
ICMP
7. What are three properties of peer-to-peer applications? (Choose three.)  
**acts as both a client and server within the same communication.**  
requires centralized account administration.  
**hybrid mode includes a centralized directory of files.**  
**can be used in client-server networks.**  
requires a direct physical connection between devices.  
centralized authentication is required.
8. Which application layer protocols correctly match a corresponding function? (Choose two.)  
DNS dynamically allocates IP addresses to hosts  
**HTTP transfers data from a web server to a client**  
POP delivers email from the client to the server email server  
SMTP supports file sharing  
**Telnet provides a virtual connection for remote access**
9. Which email components are used to forward mail between servers? (Choose two.)  
MDA  
IMAP  
**MTA**

POP  
**SMTP**  
MUA

10. As compared to SSH, what is the primary disadvantage of telnet?  
not widely available  
**does not support encryption**  
consumes more network bandwidth  
does not support authentication
11. Which statements are correct concerning the role of the MTA in handling email? (Choose three.)  
routes email to the MDA on other servers  
**receives email from the client's MUA**  
receives email via the POP3 protocol  
**passes email to the MDA for final delivery**  
**uses SMTP to route email between servers**  
delivers email to clients via the POP3 protocol
12. Which two protocols are used to control the transfer of web resources from a web server to a client browser? (Choose two.)  
ASP  
FTP  
HTML  
**HTTP**  
**HTTPS**  
IP
13. A small home network has been installed to interconnect three computers together for gaming and file sharing. What two properties represent this network type? (Choose two.)  
User accounts are centralized.  
**Security is difficult to enforce.**  
Specialized operating system software is required.  
File permissions are controlled by a single computer.  
**A computer that responds to a file sharing request is functioning as a server.**
14. Which layer of the OSI model supplies services that allow user to interface with the network?  
physical  
session  
network  
presentation  
**application**  
transport
- 15.

The exhibit is a network traffic capture showing several lines of data. Line 5 is highlighted and shows an HTTP GET request to port 80. The details for this request are as follows:

No.	Time	Source	Destination	Protocol	Info
4	0.066968	10.21.92.13	198.133.219.25	TCP	[TCP segment of a reassembled PDU]
5	0.009037	10.21.92.13	198.133.219.25	HTTP	GET / HTTP/1.1
6	0.148648	198.133.219.25	10.21.92.13	TCP	http > 3912 [ACK] Seq=1 Ack=1261 Win=6932 Len=0
7	0.149821	198.133.219.25	10.21.92.13	TCP	http > 3912 [ACK] Seq=L Ack=1533 Win=10080 Len=0

Expanded details for line 5 (HTTP GET request):

- Frame 5 (326 bytes on wire, 326 bytes captured)
- Ethernet II, Src: Cisco\_3c:78:00 (00:05:9a:3c:78:00), Dst: Cisco\_86:ce:04 (00:08:a3:b6:ce:04)
- Internet Protocol, Src: 10.21.92.13 (10.21.92.13), Dst: 198.133.219.25 (198.133.219.25)
- Transmission Control Protocol, Src Port: 3912 (3912), Dst Port: http (80), Seq: 1261, Ack: 1, Len: 272
  - Source port: 3912 (3912)
  - Destination port: http (80)
  - Sequence number: 1261 (relative sequence number)
  - [Next sequence number: 1333 (relative sequence number)]
  - Acknowledgement number: 1 (relative acknowledgement number)
  - Header length: 20 bytes
  - Flags: 0x18 (PSH, ACK)
  - Window size: 65520
  - Checksum: 0x08a9 [correct]
  - TCP segment data (272 bytes)
  - [reassembled TCP segments (1532 bytes): #4(1260), #5(272)]
- Hypertext Transfer Protocol
  - GET / HTTP/1.1\r\n
  - Accept: \*/\*\r\n
  - Accept-Language: en-us\r\n

Refer to the exhibit. What is the destination port for the communication that is represented on line 5?

**80**

1261

15533

3912

65520

16. What are two characteristics of peer-to-peer networks? (Choose two.)

scalable

one way data flow

**decentralized resources**

centralized user accounts

**resource sharing without a dedicated server**

17. What application layer protocol describes the services that are used for file sharing in Microsoft networks?

DHCP

DNS

**SMB**

SMTP

Telnet

18. What are two characteristics of clients in data networks? (Choose two.)

use daemons

**initiate data exchanges**

are repositories of data

**may upload data to servers**

listen for requests from servers

19. What is the role of the OSI application layer?

provides segmentation of data

provides encryption and conversion of data

**provides the interface between the applications on either end of the network**

provides control of all the data flowing between the source and destination devices

20. How does the application layer on a server usually process multiple client request for services?

ceases all connections to the service

denies multiple connections to a single daemon

suspends the current connection to allow the new connection

**uses support from lower layer functions to distinguish between connections to the service**