

## UNIT-5: TRANSPORT & APPLICATION LAYER

### Multiple Choice Questions

1. Which OSI layer provides end-to-end communication?

- a) Physical Layer
- b) Data Link Layer
- c) Transport Layer
- d) Network Layer

**Ans:** c) Transport Layer

2. Which protocol is connection-oriented?

- a) UDP
- b) IP
- c) TCP
- d) HTTP

**Ans:** c) TCP

3. Which protocol is connectionless?

- a) TCP
- b) UDP
- c) FTP
- d) SMTP

**Ans:** b) UDP

4. TCP stands for:

- a) Transfer Control Protocol
- b) Transmission Control Protocol
- c) Transmission Communication Protocol
- d) Transport Control Protocol

**Ans:** b) Transmission Control Protocol

5. UDP stands for:

- a) User Datagram Protocol
- b) Universal Data Protocol
- c) User Data Packet
- d) Unified Datagram Process

**Ans:** a) User Datagram Protocol

**6.** Which layer performs segmentation?

- a) Physical Layer
- b) Data Link Layer
- c) Transport Layer
- d) Application Layer

**Ans:** c) Transport Layer

**7.** TCP provides:

- a) Unreliable Communication
- b) Reliable Communication
- c) Wireless Communication
- d) Broadcast Communication

**Ans:** b) Reliable Communication

**8.** Port numbers are used to identify:

- a) Routers
- b) Networks
- c) Applications/Processes
- d) Switches

**Ans:** c) Applications/Processes

**9.** What is the default port number of HTTP?

- a) 21
- b) 25
- c) 80
- d) 110

**Ans:** c) 80

**10.** What is the default port number of HTTPS?

- a) 443
- b) 80
- c) 21
- d) 53

**Ans:** a) 443

**11.** DNS is used for:

- a) Email Transfer

- b) File Transfer
- c) Name Resolution
- d) Routing

**Ans:** c) Name Resolution

**12.**DNS converts:

- a) MAC addresses to IP addresses
- b) Domain names to IP addresses
- c) IP addresses to MAC addresses
- d) Packets to Frames

**Ans:** b) Domain names to IP addresses

**13.**FTP is used for:

- a) Web Browsing
- b) File Transfer
- c) Email
- d) Routing

**Ans:** b) File Transfer

**14.**SMTP is used for:

- a) Sending Emails
- b) Receiving Emails
- c) File Sharing
- d) Web Browsing

**Ans:** a) Sending Emails

**15.**POP3 is used for:

- a) Sending Emails
- b) Receiving Emails
- c) Routing
- d) File Transfer

**Ans:** b) Receiving Emails

**16.**HTTP is used for:

- a) Email Communication
- b) File Transfer
- c) Web Page Transfer

d) Routing

**Ans:** c) Web Page Transfer

**17.**HTTPS provides:

a) Compression

b) Encryption and Security

c) Routing

d) Framing

**Ans:** b) Encryption and Security

**18.**TCP connection establishment uses:

a) Two-Way Handshake

b) Three-Way Handshake

c) Four-Way Handshake

d) Five-Way Handshake

**Ans:** b) Three-Way Handshake

**19.**Telnet is mainly used for:

a) Remote Login

b) Email Transfer

c) File Transfer

d) Web Browsing

**Ans:** a) Remote Login

**20.**Which of the following is an Application Layer protocol?

a) TCP

b) UDP

c) IP

d) HTTP

**Ans:** d) HTTP

## Fill in the Blanks

1. The Transport Layer is the \_\_\_\_\_ layer of the OSI model.  
**Ans:** Fourth
2. The Transport Layer provides \_\_\_\_\_-to-end communication.  
**Ans:** End
3. TCP stands for Transmission Control \_\_\_\_\_.  
**Ans:** Protocol
4. UDP stands for User Datagram \_\_\_\_\_.  
**Ans:** Protocol
5. TCP is a \_\_\_\_\_-oriented protocol.  
**Ans:** Connection
6. UDP is a \_\_\_\_\_ protocol.  
**Ans:** Connectionless
7. TCP provides \_\_\_\_\_ data delivery.  
**Ans:** Reliable
8. The process of dividing data into smaller units is called \_\_\_\_\_.  
**Ans:** Segmentation
9. The Transport Layer uses \_\_\_\_\_ numbers to identify applications.  
**Ans:** Port
10. The well-known port number for HTTP is \_\_\_\_\_.  
**Ans:** 80
11. The well-known port number for HTTPS is \_\_\_\_\_.  
**Ans:** 443
12. DNS stands for Domain Name \_\_\_\_\_.  
**Ans:** System
13. FTP stands for File Transfer \_\_\_\_\_.  
**Ans:** Protocol
14. SMTP is used for sending \_\_\_\_\_.  
**Ans:** Emails
15. POP3 is used for \_\_\_\_\_ emails.  
**Ans:** Receiving
16. HTTP stands for Hyper Text Transfer \_\_\_\_\_.  
**Ans:** Protocol
17. HTTPS is the secure version of \_\_\_\_\_.  
**Ans:** HTTP
18. TCP establishes a connection using a \_\_\_\_\_-way handshake.  
**Ans:** Three
19. Telnet is used for remote \_\_\_\_\_.  
**Ans:** Login

20. DNS translates domain names into \_\_\_\_\_ addresses.

**Ans:** IP