

YADAVA COLLEGE(AUTONOMOUS)
DEPARTMENT OF COMPUTER SCIENCE
COMPUTER NETWORKS

CLASS:

SEMESTER:

UNIT I

1. Which model has seven layers?
a) TCP/IP
c) Hybrid
 2. Which network type covers a city?
a) LAN
c) MAN
 3. Which service type does not require a dedicated connection?
a) Connection-oriented
c) Virtual circuit
 4. Which layer provides interfaces and services to applications?
a) Network
c) Application
 5. Which model is used by the Internet?
a) OSI
c) Hybrid
 6. Which layer is responsible for routing?
a) Network
 7. Which device connects multiple LANs?
a) Switch
c) Router
 8. Which layer ensures reliable delivery and error recovery?
a) Physical
c) Network
 9. Which model has seven layers?
b) OSI
 10. Which network type covers a city?
b) WAN
 11. Which service type does not require a dedicated connection?
b) Connectionless
 12. Which layer provides interfaces and services to applications?
b) Transport
 13. Which model is used by the Internet?
b) TCP/IP
 14. Which layer is responsible for routing?
b) Transport
 15. Which device connects multiple LANs?
b) Hub
 16. Which layer ensures reliable delivery and error recovery?
b) Transport
 17. Which model has seven layers?
d) Internet
 18. Which network type covers a city?
d) PAN
 19. Which service type does not require a dedicated connection?
d) Circuit-switched
 20. Which layer provides interfaces and services to applications?
d) Data Link

9. Which service primitive initiates communication?

- a) SEND
 - b) CONNECT
 - c) RECEIVE
 - d) DISCONNECT

10. Which model compares OSI and TCP/IP?

- a) Hybrid
 - b) Protocol Stack
 - c) **Reference Model**
 - d) Layered

UNIT II

11. Which medium uses magnetic tapes for data transfer?

- | | |
|--------------------------|-------------------------|
| a) Magnetic Media | b) Coaxial Cable |
| c) Twisted Pair | d) Optical Fiber |

12. Which transmission requires line-of-sight?

13. Which ISDN type supports both voice and data services?

14. Which spectrum includes infrared waves?

- a) Visible Spectrum
 - b) Radio Spectrum
 - c) Electromagnetic Spectrum**
 - d) Microwave Spectrum

15. Which ISDN interface connects user devices?

- a) S Interface
 - b) T Interface
 - c) U Interface
 - d) **R Interface**

16. Which transmission uses fiber optics?

- a) Radio Transmission b) Microwave Transmission
c) Infrared Transmission d) **Light Wave Transmission**

17. Which ATM concept replaces circuit switching?

- | | |
|----------------|----------------------------|
| a) Frame Relay | b) Virtual Circuits |
| c) DSL | d) Packet Switching |

18. Which ISDN architecture defines system structure?
- a) ISDN Services
 - b) ISDN System Architecture**
 - c) ISDN Protocols
 - d) ISDN Interface
19. Which medium is most prone to interference?
- a) Magnetic Media
 - b) Coaxial Cable
 - c) Twisted Pair**
 - d) Optical Fiber
20. Which ISDN perspective focuses on future expansion?
- a) ISDN Services
 - b) ISDN Interface
 - c) Perspective on N-ISDN**
 - d) ISDN Protocols

UNIT III

21. Which service is provided to the network layer?
- a) Framing**
 - b) Routing
 - c) Addressing
 - d) Encryption
22. Which technique detects errors?
- a) Error Correcting Codes
 - b) Error Detecting Codes**
 - c) Flow Control
 - d) Framing
23. Which protocol allows one-way communication without restrictions?
- a) Simplex Stop-and-Wait
 - b) Unrestricted Simplex Protocol**
 - c) Sliding Window Protocol
 - d) Go-Back-N Protocol
24. Which protocol waits for acknowledgment before sending the next frame?
- a) Simplex Stop-and-Wait**
 - b) Unrestricted Simplex
 - c) Selective Repeat
 - d) Sliding Window
25. Which protocol handles noisy channels?
- a) Simplex Protocol
 - b) Stop-and-Wait
 - c) Simplex Protocol for Noisy Channel**
 - d) Go-Back-N
26. Which sliding window protocol retransmits all frames after an error?
- a) Selective Repeat
 - b) Go-Back-N**
 - c) Stop-and-Wait
 - d) Simplex
27. Which sliding window protocol retransmits only erroneous frames?
- a) Go-Back-N
 - b) Stop-and-Wait
 - c) Selective Repeat**
 - d) Simplex

28. Which control mechanism prevents buffer overflow?

- | | |
|------------------|------------------------|
| a) Error Control | b) Flow Control |
| c) Framing | d) Routing |

29. Which framing method uses flags and bit stuffing?

- a) Character Count
 - b) Byte Stuffing
 - c) **Bit Stuffing**
 - d) Parity

30. Which error control technique adds redundancy bits?

- | | |
|--------------------|----------------------------|
| a) Error Detection | b) Error Correction |
| c) Flow Control | d) Framing |

UNIT IV

31. Which routing algorithm uses flooding?

- a) Shortest Path
 - b) Flooding
 - c) Distance Vector
 - d) Hierarchical

32. Which routing algorithm uses hop count?

33. Which protocol provides connection-oriented service?

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

34. Which protocol provides connectionless service?

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

35. Which TCP feature ensures reliable delivery?

- a) Congestion Control
 - b) Acknowledgment
 - c) Routing
 - d) Segmentation

36. Which field is found in TCP segment header?

- | | |
|----------------|---------------------------|
| a) Source IP | b) Sequence Number |
| c) MAC Address | d) TTL |

37. Which algorithm avoids congestion in TCP?

- a) Sliding Window
 - b) Congestion Control
 - c) Routing
 - d) Checksum

38. Which protocol is used for wireless transport?

- a) TCP
 - b) UDP
 - c) **Wireless TCP**
 - d) ICMP

39. Which process releases a TCP connection?

- a) Routing
 - b) Segmentation
 - c) **Connection Termination**
 - d) Acknowledgment

40. Which protocol is used for best-effort delivery?

UNIT V

41. Which algorithm uses a single key for encryption and decryption?

42. Which algorithm uses two keys?

- a) DES
 - b) AES
 - c) Public Key
 - d) Caesar Cipher

43. Which protocol is used for email transfer?

44. Which component formats email messages?

- a) Mail Server
 - b) User Agent
 - c) DNS
 - d) Router

45. Which protocol is used to retrieve web pages?

46. Which layer handles email privacy?

- a) Network
 - b) Transport
 - c) **Application**
 - d) Data Link

47. Which protocol resolves domain names?

- a) HTTP
 - b) SMTP
 - c) DNS
 - d) TCP

48. Which side of the web handles user requests?

- a) Client Side**
 - b) Server Side**
 - c) Back End**
 - d) Router**

49. Which side of the web processes data and sends responses?

- | | |
|----------------|-----------------------|
| a) Client Side | b) Server Side |
| c) Router | d) Switch |

50. Which cryptographic principle ensures data integrity?

- a) Confidentiality
 - b) Hashing
 - c) Authentication
 - d) Routing