Mathatma Gandhi University
BSc Computer Science IIIrd semester

BCS 304 DATA COMMUNICATION AND NETWORKING

MULTIPLE CHOICE QUESTIONS

1. A computer network permits sharing of

   a. Resources
   b. Information
   c. **Both a & b**
   d. None of these

2. The first operational computer network in the world was the _____ for the United States Department of Defense

   a. **ARPANET**
   b. ERNET
   c. SKYNET
   d. DARPANET

3. ATM stands for

   a. Automatic taller machine
   b. **Automated teller machine**
   c. Automatic transfer machine
   d. Automated transfer machine

4. _____ is the technology that connects the machines and people within a site in a small area

   a. **LAN**
   b. MAN
   c. WAN
   d. None of these

5. _____ is a network that covers geographic areas that are larger, such as districts or cities

    a. LAN
    b. **MAN**
    c. WAN
    d. None of these

6. _____ is a network that this technology connects sites that are in diverse locations

    a. LAN
    b. MAN
    c. **WAN**
    d. None of these

7. _____ is a collection of point-to-point links that may form a circle

    a. LAN
    b. MAN
    c. WAN
    d. **Ring topology**

8. The ISDN Internetworking Equipment devices are

    a. Terminal Adapters(TAs)
    b. ISDN Bridges
    c. ISDN Routers
    d. **All of these**

9. ATM networks are

    a. connectionless
    b. Interconnected
    c. **connection oriented**
    d. None of these

10. DHCP stands for

    a. **Dynamic Host Configuration Protocol**
    b. Digital Host Communication Provider
    c. Digital Host Communication Protocol
    d. Dynamic Host Configuration Provider

11. Which protocol layer uses the protocols are WWW, HTTP, FTP, SMTP, e-mail etc

    a. **Application Layer Protocol**
    b. Transport Layer Protocol
    c. Internet Layer Protocol
    d. Hardware Layer

12. The internetworking protocol is known as

    a. SMTP
    b. PPP
    c. **TCP/IP**
    d. NNTP

13. If single computer network is divided into segments and router are added between them it forms an

    a. Internet
    b. **Internetwork**
    c. Network
    d. Internetworking

14. Check sum is used for

    a. Error correction
    b. **Error detection**
    c. Both a & b
    d. None of these

15. The type of packet format supported by X.25 are as follows

    a. Control packet
    b. Data packet
    c. **Both a & b**
    d. None of these

16. ISDN stands for

    a. **Integrated Service Digital Network**
    b. Interaction System Digital Network
    c. Inexpensive System Digital Network
    d. None of these

17. If routing information is automatically updated by routers when changes are made to the network configuration are called

    a. Fixed routing
    b. **Dynamic routing**
    c. Both a & b
    d. Distributed routing

18. ARP stands for

    a. **Address Resolution Protocol**
    b. Address Routing Protocol
    c. Address Routing Packet
    d. Address Routing Program

19. If two or more routers are connected to the same subnet, the network administration determines which of the routers the messages should be sent to eliminate this problem._____ are used

    a. MAC messages
    b. **ICMP messages**
    c. INDP messages
    d. IMCP messages

20. If two or more routers are available in distributed routing, which route should be selected

    a. High possible cost
    b. Least possible cost
    c. Link cost
    d. **Both b & c**

21. Multi-path routing can be achieved in

    a. Distance-vector type
    b. Link-state type
    c. **Both a & b**
    d. None of these

22. Distance vector protocols are

    a. RIP
    b. IGRP(Interior Gateway Routing Protocol)
    c. **Both a & b**
    d. None of these

23. The word PPP stands for

    a. **Point to Point Protocol**
    b. Packet to Packet Protocol
    c. Point to Packet Protocol
    d. Packet to Point Protocol

24. The frequency range of wireless LAN is

    a. 900 MHz bands

b. 2GHz bands
c. 5 GHz bands
d. **All of these**

25._____ are wireless network standard with a data rate of only 2Mbps

a. **IEEE802.11a**
b. IEEE802.11b
c. IEEE803.11a
d. IEEE803.11b

26. Cellular radio has another popular names as

a. Cellular mobile
b. Cellular phone
c. **Both a & b**
d. None of these

27.The disadvantages of mobile communication are

a. Fixed network needed for the base stations
b. Handover(changing from one cell to another) necessary
c. Interference with other cells such as co-channel, adjacent-channel
d. **All of these**

28. Repeater operates in which layer of the OSI model

a. **Physical Layer**
b. Network Layer
c. Data link Layer
d. Transport Layer

29.ETSI stands for

a. **European Telecommunication Standards Institute**
b. European Telephone Standards Institute
c. European Telecommunication Systems Institute

d. European Telecom Standards Institute

30. GSM(Global System for Mobile Communication) is a _____ digital mobile telephones standard using a combination Time Division Multiple Access(TDMA) and FDMA(Frequency Division Multiple Access)

    a. First generation
    b. **Second generation**
    c. Third generation
    d. None of these

31. How many frames are included for traffic in 26TDMA frames

    a. 1
    b. **24**
    c. 25
    d. 16

32. What is the port number of the HTTP

    a. **80**
    b. 25
    c. 23
    d. 20/21

33. What is the port number of the SMTP

    a. **25**
    b. 23
    c. 20/21
    d. 27960

34. TCP is _____

    a. Connection-oriented
    b. Reliable
    c. **Both a & b**
    d. None of these

35. Which is a network protocol that is based on UDP and is a component of the Internet Protocol Suite, defined by IETF(Internet Engineering Task Force)

    a. **SNMP**
    b. Scalability
    c. Screening
    d. Multicasting

36. In X.25 defines the protocols from

    a. Layer 2 to Layer 3
    b. Layer 1 to Layer 2
    c. **Layer 1 to Layer 3**
    d. Layer 3 to Layer 2

37. Advantages of cell relay are

    a. High-speed transmission
    b. Multiplexing transmission
    c. **Both a & b**
    d. None of these

38. When compared with the OSI reference model, the IEEE standard contains the following layers:

    a. Physical layer
    b. Medium access control(MAC) equivalent to the lower part of the OSI data link layer
    c. Logical link layer(LAC) equivalent to the upper part of the data link layer
    d. Network layer, the OSI network layer, that performs some of the higher order layer functions
    e. **All of these**

39. In a token ring, the stations are connected to the _____

    a. **Logical ring**
    b. Physical ring
    c. Both a & b
    d. None of these

40. A _____ preamble is used to synchronize the receiver's clock

a. Four-byte
b. Three-byte
c. Two-byte
d. **One-byte**

41. The destination address and source address field is similar to

a. **IEEE 802.3 or CSMA/CD bus**
b. IEEE 802.4 or token bus
c. IEEE 802.5 or token ring
d. IEEE 802.6 or MAN protocol

42. IPv4 Address is

a. 8 bit
b. 16 bit
c. **32 bit**
d. 64 bit

43. Which function allows dumping of invalid packets for a specific network instead of forwarding

a. Forwarding function
b. **Filtering function**
c. Both a & b
d. None of these

44. The word SLIP stands for

a. **Serial Line IP**
b. Standard Line IP
c. Serial Link IP
d. Standard Link IP

45. What is the port number of the FTP

a. 25
b. 23
c. **20/21**
d. 27960

46. The SMDS is similar to which transfer mode

   a. Synchronous transfer mode
   b. **Asynchronous transfer mode**
   c. Both a & b
   d. None of these

47. PDUs contain

   a. Source address
   b. Destination address
   c. **Both a & b**
   d. None of these

48. Frame relay indicates network congestion using two flags namely _____ bits in data frames

   a. Forward Explicit Congestion Notification(FECN)
   b. Backward Explicit Congestion Notification(BECN)
   c. **Both a & b**
   d. None of these

49. ISDN is a group of _____ standards relating to digital transmission across conventional copper wire telephone lines, as also other media

   a. CCITT
   b. ITU
   c. **Both a & b**
   d. None of these

50. The B-channel is capable of carrying both

   a. Voice
   b. Data
   c. **Both a & b**
   d. None of these