CSC 305

B.Sc. VIth SEMESTER EXAMINATION, 2023-24

COMPUTER SCIENCE

(Data Communication and Computer Networks)

(CBCS Mode)

Date (तिथि) : _____

Paper ID
(To be filled in the OMR Sheet)

5390

अनुक्रमांक (अंकों में) :
Roll No. (In Figures) :
अनुक्रमांक (शब्दों में) : _____

Roll No. (In Words) : _____

Time : 1:30 Hrs.
समय : 1:30 घण्टे

Max. Marks : 75
अधिकतम अंक : 75

नोट : पुस्तिका में 50 प्रश्न दिये गये हैं, समी प्रश्न करने होंगे। प्रत्येक प्रश्न 1.5 अंक का होगा।

1. What is a computer network ?

    (A)   A device used to display information on a computer screen

    (B)   A collection of interconnected computers and devices that can communicate and share resources

    (C)   A type of software used to create documents and presentations

    (D)   The Physical casing that protects a computer's internal components

2. Which of the following is an example of Bluetooth ?

    (A)   Wide Area Network

    (B)   Virtual Private Network

    (C)   Local Area Network

    (D)   Personal Area Network

3. What is the full form of OSI ?

    (A)   Optical Service Implementation

    (B)   Open Service Internet

    (C)   Open System Interconnection

    (D)   Operating System Interface

4. How many layers are there in the ISO OSI reference model ?

    (A)   7

    (B)   5

    (C)   4

    (D)   6

5. Which topology requires a multipoint connection ?

    (A)   Ring

    (B)   Bus

    (C)   Star

    (D)   Mesh

6. Which of the following is the network layer protocol for the internet ?

    (A) Hypertext transfer protocol

    (B) File transfer protocol

    (C) Ethernet

    (D) Internet protocol

7. Which network topology requires a central controller or hub ?

    (A) Ring

    (B) Bus

    (C) Star

    (D) Mesh

8. What type of transmission is involved in communication between a computer and a keyboard ?

    (A) Half-duplex

    (B) Full-duplex

    (C) Simplex

    (D) Automatic

9. Which layer provides the services to user ?

    (A) Physical layer

    (B) Presentation layer

    (C) Session layer

    (D) Application layer

10. Two devices are in network if _____ .

    (A) A process in one device is able to exchange information with a process in another device

    (B) A process is running on both devices

    (C) PIDs of the processes running of different devices are same

    (D) A process is active and another is inactive

11. Physical or logical arrangement of network is _____.

 (A) Topology

 (B) Routing

 (C) Networking

 (D) Control

12. WAN stands for _____.

 (A) World area network

 (B) Wide area network

 (C) Web area network

 (D) Web access network

13. Which of this is not a guided media ?

 (A) Fiber optical cable

 (B) Coaxial cable

 (C) Wireless LAN

 (D) Copper wire

14. The sharing of a medium and its link by two or more devices is called _____.

 (A) Fully duplexing

 (B) Multiplexing

 (C) Microplexing

 (D) Duplexing

15. Multiplexing is used in _____.

 (A) Packet switching

 (B) Circuit switching

 (C) Data switching

 (D) Packet & Circuit switching

16. Multiplexing provides _____.

    (A)   Efficiency

    (B)   Privacy

    (C)   Anti jamming

    (D)   Both Efficiency & Privacy

17. The three topologies associated with LANs are _____.

    (A)   Mesh, Tree and Bus topology

    (B)   Tree, Circular and Ring topology

    (C)   Bus, Ring and Star topology

    (D)   Hybrid, Mesh and Star topology

18. _____ topology is a combination of two or more topologies.

    (A)   Star

    (B)   Hybrid

    (C)   Bus

    (D)   Ring

19. Which protocol is most frequently used in Star topology ?

    (A)   Modem

    (B)   Cable

    (C)   DSL

    (D)   Ethernet

20. FDDI stands for _____.

    (A)   Fiber Distributed Data Interface

    (B)   First Digital Data Interface

    (C)   Fast Data Distribution Index

    (D)   Fiber Distributed Data Index

21. In a Ring topology network, the data flows _____.

(A) In one direction only

(B) Away from the tokens on the ring

(C) In several directions

(D) In a direction where the computers in a network are fully functional

22. Bridge is an example of a _____ device.

(A) Peripheral

(B) Network navigation

(C) Storage

(D) Central connecting

23. Which of the following tasks is not done by data link layer ?

(A) Framing

(B) Error control

(C) Flow control

(D) Channel coding

24. CRC stands for _____.

(A) Cyclic redundancy check

(B) Code repeat check

(C) Code redundancy check

(D) Cyclic repeat check

25. Which one of the following is not a function of network layer ?

(A) routing

(B) Inter-networking

(C) Congestion control

(D) Error control

26. Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets ?

(A) Ring

(B) Local area

(C) Hierarchical

(D) Star

27. The location of a resource on the internet is given by its ?

(A) Protocol

(B) URL

(C) E-mail address

(D) ICQ

28. The term HTTP stands for ?

(A) Hyper terminal tracing program

(B) Hypertext tracing protocol

(C) Hypertext transfer protocol

(D) Hypertext transfer program

29. Which software prevents the external access to a system ?

(A) Firewall

(B) Gateway

(C) Router

(D) Virus Checker

30. Which one of the following is the most common internet protocol ?

(A) HTML

(B) NetBEUI

(C) TCP/IP

(D) IPX/SPX

31. The term FTP stands for ?

    (A) File transfer program

    (B) File transmission protocol

    (C) File transfer protocol

    (D) File transfer protection

32. Which one of the following in not a network topology ?

    (A) Star

    (B) Ring

    (C) Bus

    (D) Peer to Peer

33. Which layer of the TCP/IP stack corresponds to the OSI model transport layer ?

    (A) Host to host

    (B) Application

    (C) Internet

    (D) Network Access

34. The term IPv4 stands for ?

    (A) Internet Protocol Version 4

    (B) Internet Programming Version 4

    (C) International Programming Version 4

    (D) None of these

35. The class-based addressing is also known as :

    (A) Modern Model

    (B) Classful Model

    (C) Classless Model

    (D) Heterogeneous Model

36. Which of these is not applicable for IP protocol ?

    (A)   Connectionless

    (B)   Offer reliable service

    (C)   Offer unreliable service

    (D)   Does not offer error reporting

37. In the OSI model, encryption and decryption are functions of the layer :

    (A)   Application

    (B)   Presentation

    (C)   Session

    (D)   Transport

38. The process-to-process delivery of the entire message is the responsibility of the layer :

    (A)   Application

    (B)   Transport

    (C)   Network

    (D)   Physical

39. Which of the following is an application layer service ?

    (A)   Mail service

    (B)   Remote log-in

    (C)   File transfer and access

    (D)   All the above

40. The layer changes bits into electromagnetic signals for OSI model :

    (A)   Physical

    (B)   Data link

    (C)   Transport

    (D)   Application

41. When a host on network A sends a message to a host on network B, which address does the router look at ?

    (A)   Port
    (B)   Logical
    (C)   Physical
    (D)   Specific

42. In Multicast Routing Protocol, the broadcast packets get circulated into network that creates _____ .

    (A)   Blocks
    (B)   Gaps
    (C)   Holes
    (D)   Loops

43. The data rate is sometimes called the rate :

    (A)   Baud
    (B)   Bit
    (C)   Signal
    (D)   None of the above

44. In fiber optics, the signal is _____ waves.

    (A)   light
    (B)   Radio
    (C)   Infrared
    (D)   Very low-frequency

45. TCP/IP model IPV4. Address is :

    (A)   8 bit
    (B)   16 bit
    (C)   32 bit
    (D)   64 bit

46. DNS is the abbreviation of :

   (A)   Domain Network Service

   (B)   Domain Name System

   (C)   Dynamic Network System

   (D)   Dynamic Name System

47. Bluetooth is an example of :

   (A)   Personal area network

   (B)   Local area network

   (C)   Virtual private network

   (D)   None of these

48. ICMP is primarily used for :

   (A)   Error and diagnostic functions

   (B)   Addressing resolution

   (C)   Forwarding packet

   (D)   None of the mentioned

49. This is not a application layer protocol :

   (A)   HTTP

   (B)   SMTP

   (C)   FTP

   (D)   TCP

50. Bridges work at _____ layer of the OSI model ?

   (A)   Presentation

   (B)   Session

   (C)   Network

   (D)   Data link

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