

SECTION A:

**QUESTION ONE(30 MARKS)**

1. Computer Network is
  - A. Collection of hardware components and computers
  - B. Interconnected by communication channels
  - C. Sharing of resources and information
  - D. All of the Above
  
2. What is a Firewall in Computer Network?
  - A. The physical boundary of Network
  - B. An operating System of Computer Network
  - C. A system designed to prevent unauthorized access
  - D. A web browsing Software
  
3. How many layers does OSI Reference Model has?
  - A. 4
  - B. 5
  - C. 6
  - D. 7
  
4. DHCP is the abbreviation of
  - A. Dynamic Host Control Protocol
  - B. Dynamic Host Configuration Protocol
  - C. Dynamic Hyper Control Protocol
  - D. Dynamic Hyper Configuration Protocol
  
5. IPV4 Address is
  - A. 8 bit
  - B. 16 bit
  - C. 32 bit
  - D. 64 bit
  
6. DNS is the abbreviation of
  - A. Dynamic Name System
  - B. Dynamic Network System
  - C. Domain Name System
  - D. Domain Network Service
  
7. What is the meaning of Bandwidth in Network?
  - A. Transmission capacity of a communication channels
  - B. Connected Computers in the Network
  - C. Class of IP used in Network
  - D. None of Above
  
8. ADSL is the abbreviation of

- b) Chief network
- c) Prime network
- d) Overlay network

24. In computer network nodes are

- a) The computer that originates the data
- b) The computer that routes the data
- c) The computer that terminates the data
- d) all of the mentioned

25. Communication channel is shared by all the machines on the network in

- a) Broadcast network
- b) Unicast network
- c) Multicast network
- d) None of the mentioned

26. Bluetooth is an example of

- a) Personal area network
- b) Local area network
- c) Virtual private network
- d) None of the mentioned

27. A \_\_\_\_\_ is a device that forwards packets between networks by processing the routing information included in the packet.

- a) Bridge
- b) Firewall
- c) Router
- d) All of the mentioned

28. A list of protocols used by a system, one protocol per layer, is called

- a) Protocol architecture
- b) Protocol stack
- c) Protocol suit
- d) None of the mentioned

29. Network congestion occurs

- a) In case of traffic overloading
- b) When a system terminates
- c) When connection between two nodes terminates
- d) None of the mentioned

30. Which one of the following extends a private network across public networks?

- a) Local area network
- b) Virtual private network
- c) Enterprise private network
- d) Storage area network

**QUESTION TWO (20 MARKS)**

(a). Explain the following terms in Network management (10 mks)

- i. Configuration management
- ii. Performance and Fault Management
- iii. Cost Management
- iv. Security Management
- v. End User Support management

(b) Discuss the following Network media types (6 mks)

- i. Copper Media
- ii. Optical media
- iii. Wireless Media

(c) List four internet communication tools (4 mks)

**QUESTION THREE (20 MARKS)**

(a). Discuss any five network services required in a computer network :( 10 mks)

(b)List and explain the functions of any five network intermediary devices (10 mks)

**QUESTION FOUR (20 MARKS)**

(a) Discuss five advantages and disadvantages of computer networks (10mks)

(b). what are the five components/ elements of a computer communication systems (5mks)

(c).Explain the following terms as used in computer communications systems (4mks)

- (i). Host
- (ii). Workstation
- (iii) Server
- (iv). Client

(d).Define Network management (1mk)

- A. Asymmetric Dual Subscriber Line
- B. Asymmetric Digital System Line
- C. Asymmetric Dual System Line
- D. Asymmetric Digital Subscriber Line

9. What is the use of Bridge in Network?

- A. to connect LANs
- B. to separate LANs
- C. to control Network Speed
- D. All of the above

10. Router operates in which layer of OSI Reference Model?

- A. Layer 1 (Physical Layer)
- B. Layer 3 (Network Layer)
- C. Layer 4 (Transport Layer)
- D. Layer 7 (Application Layer)

11. Bridge works in which layer of the OSI model?

- A. Application layer
- B. Transport layer
- C. Network layer
- D. Datalink layer

12. What does Router do in a network?

- A. Forwards a packet to all outgoing links
- B. Forwards a packet to the next free outgoing link
- C. Determines on which outgoing link a packet is to be forwarded
- D. Forwards a packet to all outgoing links except the originated link

13. The Internet is an example of

- A. Cell switched network
- B. circuit switched network
- C. Packet switched network
- D. All of above

14. What does protocol defines?

- A. Protocol defines what data is communicated.
- B. Protocol defines how data is communicated.
- C. Protocol defines when data is communicated.
- D. All of above

15. Repeater operates in which layer of the OSI model?

- A. Physical layer
- B. Data link layer
- C. Network layer
- D. Transport layer

16. What is the full form of RAID?
- A. Redundant Array of Independent Disks
  - B. Redundant Array of Important Disks
  - C. Random Access of Independent Disks
  - D. Random Access of Important Disks
17. Which of the following can be Software?
- A. Routers
  - B. Firewalls
  - C. Gateway
  - D. Modems
18. What is the access point (AP) in wireless LAN?
- a) Device that allows wireless devices to connect to a wired network
  - b) Wireless devices itself
  - c) Both (a) and (b)
  - d) None of the mentioned
19. WPA2 is used for security in
- a) Ethernet
  - b) Bluetooth
  - c) Wi-Fi
  - d) None of the mentioned
20. An attempt to make a computer resource unavailable to its intended users is called
- a) Denial-of-service attack
  - b) Virus attack
  - c) Worms attack
  - d) Botnet process
21. When collection of various computers seems a single coherent system to its client, then it is called
- a) Computer network
  - b) Distributed system
  - c) Both (a) and (b)
  - d) None of the mentioned
22. 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) None of the mentioned
23. Which one of the following computer network is built on the top of another network?
- a) Prior network