COMPUTER NETWORKING

Fill in the Blanks : (1 Mark)

01. The transmission of data from one computer to another or from one device to another is referred to as _____.

02. _____ is a set of rules that governs the data communications.

03. Without a protocol, two devices may be _____ but not _____.

04. A NIC provides a communication channel between computer's _____ and the _____.

05. Each NIC has its own unique _____ address.

06. A _____ is a device used to amplify the signal being transmitted on a network.

07. A repeater is a _____ but not an _____.

08. A bridge is a _____ and a repeater is an _____.

09. Bridges can divide the large network into smaller _____.

10. Router uses _____.

11. HUB is a form of _____.

12. A switched network consists of a series of interlinked nodes called _____.

13. The manner or way in which data is transmitted from one place to another is called _____.

14. A network consists of interconnected _____.

15. The way a network is laid out, either physically or logically is known as _____.

16. In star topology _____ is used.

17. In a linear bus topology, one long cable acts as a _____ to link all the devices in the network.

18. Nodes are connected to the bus cable by _____ and _____.

19. A tree topology combines characteristics of _____ and _____ topologies.

20. Twisted pair otherwise called as _____.

21. Guided media is also known as _____.

22. Unguided medium is based on _____ transmission.

23. Unguided medium is also called _____.

24. The data transfer rate of radio frequencies is _____ to _____.

25. The data transfer rate in microwave link is about _____.

26. _____ is the unit of measuring speed of data transmission.

27. A _____ is a device that regenerates and amplifies signals to create long distance networks.

28. _____ consist of two insulated copper wires arranged in a regular spiral pattern to minimize the electromagnetic interference between adjacent pairs.

29. In _____ transmission mode data is sent from sender unit to receiver unit by one bit follows another bit.

30. In _____ mode of transmission only one of the two devices sends information another receives.

31. The way network is connected together is known as _____.

32. In _____ topology all nodes are connected to a single bus.

33. _____ network is used for long distance transmission of data.

34. _____ stands for bits per second.

Multiple choice questions : (1 Mark)

01. A medium for transferring data between two locations is called_____.
(a) Network   (b) Hard disk
(c) CD ROM   (d) All of these

02. What is the name of device that connects two computers by means of telephone lines?
(a) Tape   (b) Modem
(c) Bus   (d) Cable

03. The transfer of data from CPU to peripherals devices of a computer is achieved through
(a) Modems
(b) Computer ports
(c) Interfaces
(d) Buffer memory

04. The software that you can install on PC to access the Internet is the _____.
(a) WWW   (b) TCP/IP
(c) Browser   (d) URL

05. Different computers are connected to LAN by a cable and _____.
(a) Special wires
(b) Telephone lines
(c) Modem   (d) Interface cards

06. Which of the following is suitable for networking within a building?
(a) WAN   (b) LAN
(c) MAN   (d) VAN

07. Which of the following is suitable for networking in two adjacent buildings?
(a) WAN   (b) LAN
(c) MAN   (d) VAN

08. What is the name of the network topology in which there are bidirectional links between each possible node?
(a) star   (b) ring   (c) mesh   (d) tree

09. Which of the following is least affected by addition of work station?
(a) ring   (b) bus   (c) star   (d) tree

10. Faster data communication is possible when using _____.
(a) optical fibre   (b) coaxial fibre
(c) microwave transmission
(d) none of these

11. Our public telephone network is also known as _____.
(a) Public Switched Telephone Network
(b) Private Switched Telephone Network
(c) Value Added Network
(d) None of these

12. Data transmission rate in modem is measured in
(a) Bits Per Minutes   (b) Bits Per Second
(c) Band width   (d) None of these

13. Data transmission rate is modem is measured in
(a) Bits per minutes
(b) Bits per second
(c) Band width   (d) None of them above

14. Which of the following networking solution is suitable for networking within the building
(a) WAN   (b) LAN
(c) MAN   (d) None of the above

15. Protocol is used to communicate between
(a) similar module
(b) dissimilar module
(c) both a and b
(d) None of the above

16. For communications, wide area networks use
(a) Special purpose telephone wires
(b) Fiber optics cable and microwaves
(c) Both a and b
(d) none of the above

17. A protocol is really
(a) Set demands   (b) Set of rules
(c) A translation book
(d) None of the above

18. Which of the following is not a transmission medium?
(a) Twisted pair cable
(b) Coaxial cable
(c) Modem   (d) None of these

19. Data communication cable laying is not required when using
(a) Optical fibre
(b) Coaxial fibre
(c) Microwave transmission
(d) None of these

20. Faster data communication is possible when using _____ .
(a) Optical fibre
(b) Coaxial fibre
(c) Microwave transmission
(d) None of these

21. A router must have at least _____ NICs.
(a) 2   (b) 3   (c) 4   (d) 5

22. A bridge is a _____ device.
(a) Networking
(b) Connecting
(c) Internetworking   (d) Routing

23. A _____ is the simplest of all networking/internetworking devices.
(a) Repeater   (b) Bridge
(c) Router   (d) Gateway

24. Generally, a _____ is used to divide a network into segments.
(a) Repeater   (b) Bridge
(c) Router   (d) Gateway

25. A _____ can understand multiple networking protocols.
(a) Repeater   (b) Bridge
(c) Router   (d) Gateway

26. A _____ waits for requests from a _____.
(a) Web browser, Web server
(b) Client, Server
(c) Web server, Web browse
(d) None of the above

27. Hub is used in _____.
(a) LAN
(b) Internet
(c) Personal Computer   (d) None

28. Which of the following is not a network device?
(a) Router   (b) Switch
(c) Modem   (d) Bridge

29. Which of the following is suitable for networking in two adjacent buildings ?
(a) WAN   (b) LAN
(c) MAN   (d) VAN

30. Baud rate means _____.
(a) The rate at which data is transferred
(b) The rate at which data is processed
(c) The rate at which data is received from the modem
(d) None of these

31. Baud rate is measured in _____.
(a) Bits per second
(b) Bytes per second
(c) Megabytes per second
(d) None of these

32. Which of the of following is used to connect homogeneous network?
(a) Bridge   (b) Gateway
(c) Hub   (d) None of these

Very short answer types questions: (2 Marks)

01. What is communication?
02. Write the advantages of network?
03. Define server.
04. What is a network?
05. What are the elements of LAN?
06. What is LAN?
07. What is a topology ?
08. Now many types of topology are available and what are they ?
09. What is MAN ?
10. What is WAN ?
11. What is PAN ?
12. Difference between guided media and unguided media.
13. How does Star Topology differ from Tree Topology ?
14. What is a modem ?
15. What is Bluetooth ?
16. Give examples of Wired technologies ?
17. Give examples of Wireless technologies ?
18. What do you mean by transmission mode?

Short answer types questions : (2/3 Marks)

01. Write short notes of the following:
(i) NIC
(ii) Gateway
(iii) Repeater
(iv) Hub
(v) Bridge
(vi) Server
(vii) Router
(viii) Switch
(ix) Twisted pair cable
(x) Coaxial cable
(xi) Optical fibre cable
(xii) Satellite based system
(xiii) Bluetooth
(xiv) Infrared
(xv) Microwave
(xvi) Radio link

02. Difference among twisted pair cable, coaxial cable, fibre optic cable.

03. Difference among LAN, MAN, WAN.

Distinguish Between : (Each 2 Marks)

01. Bridge and Gateway
02. Repeater and Router
03. Hub and Switch
04. Server and Client
05. Star, Bus and Ring topology
06. Radiowave and Microwave
07. Bluetooth and Infrared wave

Long question : (7 Marks)

01. Briefly describe different types of network topologies and also write their advantages and disadvantages with suitable diagram.
02. Briefly explain the devices used in Internet.
03. What is communication media? Explain the wired and wireless technologies available.