

PART A

1. In which of the following switching technology tight upper limit on block size is kept

- A) Message Switching
- B) Packet Switching
- C) Circuit Switching
- D) None of these

2. In which topology each of the machines in the network is connected to all the computers in the network.

- A) Star
- B) Tree
- C) Mesh
- D) Bus

3. In Asynchronous serial transmission the stop bit is usually _____ the length of the information bit

- A) 2.5 times
- B) 1.5 times
- C) 3 times
- D) 9 times

4. In list oriented approach _____ has the list of users who was the access rights and action privileges corresponding to each of those users for that resource

- A) Access control list
- B) Ticket control list
- C) Capability list
- D) Resource control list

5. There are _____ numbers of layers in OSI reference model

- A) 7
- B) 4
- C) 11
- D) 3

6. Which of the following device provides WAN connectivity?

- A) Repeater
- B) Hub
- C) Router
- D) None of the above

7. On broadcast network each of the machines in the network check _____ to accept the data.

- A) Destination address accompanied the data
- B) Source address accompanied the data
- C) Control character accompanied the data
- D) Source control sequence accompanied the data

8. Class B has _____ number of bits to identify the host part

- A) 16
- B) 8
- C) 32
- D) 28

9. Full form of ARP

- A) Address Resolution Protocol
- B) Access Resolution Protocol
- C) Address Ring Protocol
- D) Address Reserving Protocol

10. If a router receives a packet whose destination addresses are not in the routing table then

- A) If sends back that packet to the source, which originated the data packet
- B) If forwards the data packet to the addresses of other routers
- C) It keeps the data packet in itself
- D) None of the above

11. Token Ring uses _____ standard

- A) IEEE 802.3
- B) IEEE 802.4
- C) IEEE 802.5
- D) IEEE 802.6

12. Bridges operate at _____ layer of OSI reference model

- A) Physical
- B) Application
- C) Data link
- D) Presentation

D) 01111110

13. Fiber optic cable has _____ as transmitting medium

- A) Aluminum wire
- B) Copper wire
- C) Lead wire
- D) Glass fiber

14. Among the following identify the Passive threats

- A) Release of message contents
- B) Masquerade
- C) Message stream modification
- D) All of the above

15. _____ Utility is run to bounce a packet off the destination to check the connectivity problem in the network.

- A) RING
- B) IPCFG
- C) PING
- D) CNT

16. In Secret Key method of encryption

- A) Both sender and recipient possess the same key to encrypt and decrypt the data
- B) Both sender and recipient possess the different key to encrypt and decrypt the data
- C) Sender possess the symmetric key and recipient possess the asymmetric key to encrypt and decrypt the data
- D) Sender possess the asymmetric key and recipient possess the symmetric key to encrypt and decrypt the data

17. Using _____ source machine gets it's own IP address

- A) ARP
- B) IPARP
- C) RARP
- D) IPAARP

18. The Flag bit pattern in frame format of HDLC is

- A) 10000001
- B) 10000000
- C) 11111111

19. SNMP model of a managed network consists of _____ number of components

- A) 6
- B) 4
- C) 5
- D) 3

20. Password Uniqueness means

- A) Users should not be allowed to use the earlier password for a specified period of time
- B) Each of the users in the network are given unique password
- C) Password of the users cannot be changed
- D) None of the above

21. Microprocessor can understand only

- A) High level language
- B) Machine language
- C) Assembly language
- D) All of these

22. For which of the following result, odd parity bit is

- A) 0110
- B) 0101
- C) 01110
- D) 1101

23. Result of an operation usually remains in _____

- A) Program counter
- B) Stack pointer
- C) Accumulator
- D) H-L pain

24. MVIA, 10 is an example of

- A) Direct addressing mode
- B) Implied addressing mode
- C) Register addressing mode
- D) Immediate addressing mode

25. If (B)=01011011, (A)=10011000, after executing the instruction CMPB,

- A) Zero flag is set
- B) Carry flag is reset
- C) Carry flag is set
- D) Zero flag is reset

- A) 200k, 100mts
- B) 20k, 100mts
- C) 200m, 50ft
- D) 20k, 50ft

26. ____ translates the source code into object code

- A) Linker
- B) Assembler
- C) Loader
- D) Compiler

33. ____ is a 40 pin device with 2 major segments: keyboard and display

- A) 8279
- B) 8212
- C) 8259
- D) 8085

27. Data transmission from computer to a printer is an example of ____

- A) Duplex transmission
- B) Simplex transmission
- C) Half duplex
- D) Doublex transmission

34. Vector address of TRAP is

- A) 0030H
- B) 0024H
- C) 0008H
- D) 0038H

28. ____ translates digital data into audio tone and audio frequencies into digital data

- A) MODEM
- B) RS 232C
- C) Interpreter
- D) Modulator

35. Which of the following operation is not related to stack?

- A) XTHL
- B) SPHL
- C) PUSH and POP
- D) None of the above

29. ____ device is designed for serial I/O

- A) Microprocessor
- B) RAM
- C) CRT terminal
- D) All of the above

36. ____ can translate 8085 mnemonics by a computer that has a microprocessor other than 8085

- A) Compiler
- B) Cross assembler
- C) Interpreter
- D) All of the above

30. Radio transmission is an example of

- A) Half duplex
- B) Full duplex
- C) Simplex
- D) Duplex

37. The mode word for the initialization of 8251A is

- A) 7Ah
- B) 8BH
- C) 11H
- D) 9CH

31. While transferring data from and to a floppy disk ____ error check method is used

- A) Checksum
- B) Cyclic redundancy check
- C) Parity check
- D) All of the above

38. IC 8259 is a ____

- A) Parallel I/O device
- B) Timer
- C) Interrupt handler
- D) General purpose device

32. In RS 232C standard, the maximum baud rate is ____ and a maximum distance is ____

39. ____ is a multiuser multitasking operating system

- A) MS-DOS
- B) OS/2
- C) WINDOWS 95
- D) UNIX

40. Consider if IOM = 0, WR = 0, RD = 1; under these conditions ____ operations is performed.

- A) Memory write
- B) Memory read
- C) I/O read
- D) I/O write

PART B

41. A device responds to ARP request

- A) By matching its IP address to the destination IP address contained in the ARP request
- B) By matching its MAC address to the destination MAC address contained in the ARP request
- C) By matching its MAC address to the source MAC address contained in the ARP request
- D) None of the above

- A) 2 and 3
- B) 1 and 2
- C) 3 and 4
- D) 1, 2, 3 and 4

42. Match the following

Set A

- 1. Remembered information
- 2. Processed objects
- 3. Personal characteristic

Set B

- i. Finger ring
- ii. Signature
- iii. Password

- A) 1 - iii, 2 - ii, 3 - i
- B) 1 - ii, 2 - i, 3 - iii
- C) 1 - iii, 2 - i, 3 - ii
- D) 1 - i, 2 - ii, 3 - iii

43. An Access control mechanism processes user's requests for resources in 3 steps they are

- A) Identification, Authentication, Actions
- B) Authentication, Identification, Actions
- C) Actions, Authentication, Identification
- D) Identification, Actions, Authentication

44. When a source is making use of Router as default gate way it encapsulate the data with

- 1. MAC address of the Router
- 2. IP address of destination device
- 3. MAC address of the destination device
- 4. IP address of the Router

45. Pick out the devices, which will not filter network traffic

- 1. Hub
- 2. Bridge
- 3. Router
- 4. Repeater

- A) 1 and 2
- B) 1 and 4
- C) 2 and 3
- D) 3 and 4

46. Among following characteristics identify the correct characteristics of Broadcast networks

- 1. Many connections exist between individual pair of machines
- 2. Different routes of different length are possible
- 3. The data is received by all the machines on the network
- 4. These have single communications channel/medium, which is shared by all the machines on the network.

- A) 1, 3
- B) 2, 4
- C) 3, 4
- D) 1, 2

47. In Synchronous Data Link Control Protocol (SDLC) up to ____ frames can be sent in a string with each frame containing up to ____ blocks.

- A) 128, 7
- B) 7, 128
- C) 128, 512
- D) 512, 7

48. In basic Control Procedure ____ and ____ is used as control codes to represent Start of text and End of text respectively according to ISO code table.

- A) SOH, EOH
- B) STH, ETH
- C) STX, ETX
- D) SOT, EOT

49. The IP address 128.0.0.0 to 191.255.255.255 belongs to ____ class

- A) A
- B) B
- C) C
- D) D

50. Following is the ARP request; identify the correct ARP reply form

MAC Header		IP Header	ARP Header
Destination	Source	Destination	Source and Target IP Address
FF.FF.FF.FF.FF.FF	02.60.8C.01.02.04	192.168.0.1	Source and Target MAC Address

- A) 02.60.8C.01.02.04.00.03.A2.05.09.90
192.168.0.1 192.168.0.4 This IS MY MAC Address
- B) 02.60.8C.01.02.04.00.03.A2.05.09.90
192.168.0.4 192.168.0.1 This IS MY MAC Address
- C) 00.03.A2.05.09.90.02.60.8C.01.02.04
192.168.0.4 192.168.0.1 This IS MY MAC Address
- D) 00.03.A2.05.09.90.02.60.8C.01.02.04
192.168.0.1 192.168.0.4 This IS MY MAC Address

51. ____, transmission begins with one start bit followed by a character and one or two stop bits, ____ is generally used in low speed transmission

- A) Synchronous format, Asynchronous transmission
- B) Asynchronous format, Asynchronous transmission
- C) Asynchronous format, Synchronous transmission
- D) Synchronous format, synchronous transmission

52. Once the TRAP interrupt is recognized, it can be cleared in two ways, they are

- a) Giving a high signal on the TRAP acknowledge pin
- b) By giving a low signal on TRAP pin
- c) Giving a low signal on the RESET IN pin

- A) a) and b)
- B) d) and c)
- C) a) and c)
- D) None of the above

53. Which of the following program can enable all the interrupts in the 8085 system?

- A) EI
MVI A, 08
SIM
- B) MVI A, 08
SIM
- C) ORI 08
SIM
- D) RIM
ANI 04
JNZ unmask

54. IN 80H instruction has ____ memory cycles and when this instruction is executed ____ process occurs

- A) 2, 80 is copied to accumulator
- B) 1, 80 is copied to memory location
- C) 3, copies the data at the port 80H into the accumulator

D) 2, copies the data 80H at the port into memory location

D) FD H

55. In linear decoding method of memory interfacing individual memory chips are selected by _____

- A) Using individual high order address lines
- B) Decoding all high order address lines
- C) Using individual low order address lines
- D) Decoding all low order address lines

56. Debouncing of the closed key achieved by waiting for _____ seconds to check the valid key press

- A) 5 ms
- B) 10 ms to 20ms
- C) 30 ms
- D) 5 ms – 30 ms

57. _____ can perform the following

- a) Examine and modify memory contents
- b) Make changes in object code
- c) Disassemble a section of program i. e., convert the object code into the source code

- A) Compiler
- B) Interpreter
- C) Debugger
- D) Assembler

58. Which of the following control word enables RST 7.5 and RST 5.5?

- A) 0A H
- B) 0D H
- C) FA H

59. Which of the following task is performed by the instruction LHLD 8050?

- A) Stores the lower byte address in the L register and the High order Byte address in the H register
- B) Stores the content of 8050 into HL pair register
- C) Stores the content of HL pair register into the memory location with address 8050
- D) Exchanges the content of HL pair register and memory location of address 8050

60. The assembler directive DATA: DB A2H, 9FH does _____

- A) Initialises an area two byte at a time and this is a convenient way of writing a data string
- B) Next block of instructions should be stored in memory locations starting at 9FAH
- C) Reserves a specified number of memory locations and it is a convenient way of writing a data string
- D) Initialises an area byte by byte. Assembled bytes of data are stored in successive memory locations until all values are stored.

PART C

61. Identify the wrong characteristics of List oriented approach

1. The access control mechanism assigns user a ticker for each resource they are permitted to access.
2. This has the advantage of runtime efficiency and increases the overhead
3. This does not have the runtime efficiency and increases the overhead
4. If a particular user's access to a resource is to be revoked then delete that user from the access control list of the resource

A) 1, 2

- B) 3, 4
- C) 2, 4
- D) 1, 3

62. When a data frame reaches router from network – arrange the following sequence of events in correct order

1. Router passes the data up to the network layer where it examines the destination IP address
2. Router strips off the data link layer information used in the encapsulation
3. It compares the destination IP address with information contained in the routing tables
4. If the routers locates the mapped destination IP address and MAC address, it encapsulates the with new MAC address information and forwards it to correct destination.

- A) 1, 2, 3, 4
- B) 2, 1, 3, 4
- C) 3, 1, 2, 4
- D) 3, 2, 1, 4

63. Match the following

Set A

1. Pure Aloha
2. Slotted allow
3. 1 – persistent CSMA
4. Non-persistent CSMA

Set B

- i. User transmit whenever they have data to be sent
- ii. When a station has to data to send it first listens to the transmission medium
- iii. The time was divided up into discrete interval each corresponding to a frame.
- iv. If the transmission medium is busy the station does not continuously sense it for the purpose of seizing it when it will be free

- A) 1 – i, 2 – ii, 3 – iii, 4 – iv
- B) 1 – i, 2 – iii, 3 – ii, 4 – iv
- C) 1 – i, 2 – ii, 3 – iii, 4 – iii
- D) 1 – ii, 2 – i, 3 – iv, 4 – iv

64. Pick out the wrong characteristics of asynchronous transmission

1. Transmitting and receiving clocks are independent of each other
2. Transmitting and receiving clocks are dependent of each other
3. Two ends of the (source and destination) of the link need not be synchronized.

4. Two ends of the (source and destination) of the link need be synchronized.

- A) 1, 4
- B) 2, 4
- C) 2, 3
- D) 1, 3

65. Arrange the OSI layers in the correct order from layer 1 to layer 7

- i. Physical
- ii. Application
- iii. Network
- iv. Transport
- v. Session
- vi. Data Link
- vii. Presentation

- A) i, iii, iv, ii, v, vii, vi
- B) i, iv, iii, iv, v, vii, ii
- C) ii, vii, v, iii, iv, vii, i
- D) ii, iii, iv, v, vii, vi, i

66. Identify the Characteristics of Open environment under discretionary access control policy

1. Only those users who have access rights and action privileges can use the resources and all others are not allowed to use the resource.
2. Users cannot access the resources unless they have been assigned the access rights and the necessary action privilege.
3. All users can access the resources unless the authorization data specifies otherwise
4. The authorization data specifies the users who should not be given access and action privileges

- A) 1, 2
- B) 1 only
- C) 3, 4
- D) 2 only

67. Match the following

Set A

1. Serial Backbone
2. Distributed Backbone
3. Collapsed Backbone
4. Parallel Backbone

Set B

- i. Known as Daisy Chaining

- ii. Can be built by installing a backbone hub in a central place
- iii. A centralized router that interconnects all the LAN segments in a given building
- iv. Multiple segments can be supported in the same telephone closet

- A) 1 - i, 2 - iii, 3 - ii, 4 - iv
- B) 1 - i, 2 - iv, 3 - ii, 4 - iii
- C) 1 - i, 2 - ii, 3 - iii, 4 - iv
- D) 1 - i, 2 - iii, 3 - iv, 4 - ii

68. Which of the following Programs sends two ASCII character (m and N) to a VDU driver by 8251A? The VDU inputting and outputting port addresses are 60 H and 61 H respectively

A) MVI A, 8B
OUT 60
MVI A, 11
OUT 60
MVI A, 4D
OUT 60
MVI A, 4E
OUT 61

B) IN 60
ANI 01
JZ READ
MVI A, 4E
OUT 61

C) Either A) or B)

D) None of the above