TYPICAL QUESTIONS & ANSWERS

Part1

OBJECTIVE TYPE QUESTIONS

Q.1. The number of point-to-point links required in a fully connected network for 50 entities is

(A) 1250 **(B)** 1225
(C) 2500 **(D)** 50

Ans: (C)

Q.2. For a non-blocking cross bar configuration, taking N as the number of subscribers, there will be_____number of cross points and _____number of switches for establishing connections when all the subscribers are engaged.

(A) N/2, N^2 **(B)** N^2 , N/2
(C) 2N, N^2 **(D)** N/2, N^3

Ans: (B)

Q.3. Echo suppressor is detrimental to full duplex operation because

(A) It disables one of the two pairs in a four-wire trunk line when a signal is detected on the other pair.
(B) It enables one of the two pairs in a four-wire trunk line when a signal is detected on the other pair.
(C) It activates both the pairs of a four-wire trunk line.
(D) It is independent of line conditions.

Ans: (A)

Q.4. Telephone companies normally provide a voltage of_____to power telephones.

(A) +24 volts DC **(B)** -24 volts DC
(C) +48 volts DC **(D)** -48 volts DC.

Ans: (D)

Q.5. The situation when both transmitter and receiver have to work in tandem is referred to as

(A) parallel **(B)** serial
(C) synchronous **(D)** asynchronous

Ans: (C)

Q.6. Common channel signalling_____

(A) Uses the speech or data path for signaling.
(B) Does not use the speech or data path for signaling.
(C) Needs no additional transmission facilities.
(D) Finds it difficult to handle signaling during speech.

Ans: (C)

Q.7. A large numbers of computers in a wide geographical area can be efficiently connected using
- **(A)** twisted pair lines
- **(B)** coaxial cables
- **(C)** Communication satellites
- **(D)** all of the above

Ans: (D)

Q.8. Which transmission mode is used for data communication along telephone lines?
- **(A)** Parallel
- **(B)** Serial
- **(C)** Synchronous
- **(D)** Asynchronous

Ans: (B)

Q.9. A sample rate of_____is required for a good quality representation of telephone conversation.
- **(A)** 4500 times per second.
- **(B)** 700 integer sample points per minute.
- **(C)** 50 times per second per mile of distance travelled.
- **(D)** 8000 times per second.

Ans: (C)

Q.10. The_____is a circuit-switched network, while the_____is a packet-switched network.
- **(A)** Telephone, ATM
- **(B)** SONET and FDDI
- **(C)** Satellite, Telephone
- **(D)** FDDI and SONET

Ans: (A)

Q.11. A Master group consists of
- **(A)** 12 voice channels.
- **(B)** 24 voice channels
- **(C)** 60 voice channels.
- **(D)** 300 voice channels

Ans: (D)

Q.12. Direct inward dialling is used as a feature in
- **(A)** PSTN.
- **(B)** PBX.
- **(C)** EPABX.
- **(D)** VPN.

Ans: (C)

Q.13. Trunks are the lines that run between
- **(A)** Subscribers and exchange
- **(B)** switching system and power plant
- **(C)** Local area network.
- **(D)** Switching stations.

Ans: (D)

Q.14. Traffic Capacity is given by
(A) Switching capacity × Theoretical maximum load
(B) Switching capacity / Theoretical maximum load
(C) Theoretical maximum load / switching capacity
(D) Theoretical maximum load × Switching capacity

Ans: (A)

Q.15. In a time multiplexed space switching system, one speech sample appears every
(A) 125 micro sec **(B) 20** msec
(C) 125 msec **(D)** 1 sec

Ans: (A)

Q.16. ISDN handles data pertaining to
(A) All digital services **(B)** Speech and Video
(C) Computer data only **(D)** Speech only

Ans: (A)

Q.17. A star connected intermediate exchange is known as a
(A) Repeater exchange
(B) Hub exchange
(C) Private branch exchange
(D) Tandem exchange

Ans: (B)

Q.18. Time synchronization is necessary in
(A) FDM. **(B)** TDM.
(C) WDM. **(D)** Quadrature multiplexing

Ans: (B)

Q.19. In a frame transmission, CRC stands for
(A) Code Renewable Check
(B) Cyclic Redundancy Check
(C) Control and Refresh Code
(D) Cyclic Refreshing of CPU

Ans: (B)

Q.20. In a LAN network every system is identified by
(A) Name **(B)** MAC address
(C) IP Address **(D)** Serial number given by manufacturer

Ans: (C)

Q.21. An off-hook signal will repeat for a/an_____duration.

(A) finite
(B) infinite
(C) duration of 40 seconds
(D) duration of 80 seconds

Ans: (A)

Q 22. Typical human voice is centered around_____Hz.
(A) 200-400 **(B)** 280-3000
(C) 400-600 **(D)** 1400-1800

Ans: (B)

Q 23. Using_____each connected device is assigned a time slot whether or not the device has any thing to send.
(A) WDM **(B)** FDM
(C) TDM **(D)** STDM

Ans: (C)

Q.24. When a switch capacity is full, calls coming into that switch are said to be_____.
(A) open **(B)** shorted
(C) blocked **(D)** shunted

Ans: (C)

Q.25. Using_____ARQ, a sending modem must wait for a return ACK for each sent block before sending the next block.
(A) discrete **(B)** efficient
(C) continuous **(D)** delivered

Ans: (A)

Q.26. A/An_____network is typically a company network that connects multiple company locations into a single network.
(A) local area **(B)** enterprise
(C) campus wide **(D)** protocol.

Ans: (B)

Q.27. Ethernet 10 Base 2 is an example of_____network topology.
(A) Bus **(B)** Ring
(C) Star **(D)** Mesh

Ans: (A)

Q.28. The_____electro mechanical switch (developed in 1938) had fewer moving parts than earlier switches.
(A) No. 1ESS **(B)** Strowger
(C) Step-by-step **(D)** Crossbar

Ans: (D)

Q.29. Side tone is the speech heard by
(A) the receiving subscriber
(B) both the receiving and calling subscriber
(C) by on looker
(D) by calling subscriber

Ans: (D)

Q.30. Busy hour traffic is the
(A) maximum average simultaneous traffic.
(B) traffic during peak hour.
(C) traffic when all subscribers are engaged.
(D) the duration of maximum calls.

Ans: (B)

Q.31. The final selector is connected to the
(A) calling subscriber. **(B)** switching network.
(C) called subscriber. **(D)** line finder.

Ans: (C)

Q.32. In a DTMF phone a dialling of 8 generates
(A) 1336 Hz- 770 Hz **(B)** 1209 Hz - 1477 Hz
(C) 1209 Hz- 941 Hz **(D)** 1336 Hz-852 Hz

Ans: (D)

Q.33. SPC stands
(A) Standard Protocol Control
(B) Stored Program Control
(C) Signaling and switching Centre
(D) Signaling Process Center

Ans: (B)

Q.34. For two stage network the switching elements for M inlets with r blocks and N outlets with s blocks is given by
(A) Ms + Nr **(B)** Mr + Ns
(C) (M + N) (r+ s) **(D)** (M + N)rs

Ans: (A)

Q.35. As per Nyquist criterion the sampling rate is
(A) 2fs **(B)** (1/2)fs
(C) (1/2fs) **(D)** (2/fs)
Where fs is the signal frequency

Ans: (A)

Q.36. Common channel signalling in SS7 is
(A) out band control channel.
(B) in band control channel.
(C) speech control channel.
(D) none of the above.

Ans: (B)

Q.37. Broad Band ISDN handles data rate of about
(A) 64 kbps **(B)** 100 mbps
(C) 5.4 mbps **(D)** 2.048 mbps

Ans: (A)

Q.38. MAC address helps in
(A) multimedia access control.
(B) media access control.
(C) mobile access control.
(D) master access point control

Ans: (B)

Q.39. Telex is a
(A) Telephone Service between various subscribers
(B) Tele printer Service between various subscribers
(C) Television Service between various subscribers
(D) Telegraph Service between various subscribers

Ans: (B)

Q.40. The bandwidth requirement of a telephone channel is
(A) 3 KHz **(B)** 15 KHz
(C) 5 KHz **(D)** 25 KHz

Ans: (A)

Q.41. Distortion caused on telephone line by an adjacent one is called
(A) Cross Fire **(B)** Inductive Disturbance
(C) Cross Talk **(D)** None of these

Ans: (C)

Q.42. Erlang is used to
(A) Measure busy period **(B)** Give total busy period in minutes
(C) Measure average call rate **(D)** Indicate total call period

Ans: (A)

Q.43. The grade of service is measured in
(A) Percentage **(B)** Number
(C) Fractional Number **(D)** Logarithmic Number

Ans: (C)

Q.44. Network with point-to-point link is known as
(A) Fully Connected Network **(B)** Half Connected Network
(C) Duplex Connected Network **(D)** None of these

Ans: (A)

Q.45. SPC is used for
(A) Carrying Exchange Control Functions
(B) Carrying Subscriber Control Functions
(C) Exchange Hardware
(D) Signalling Purpose

Ans: (A)

Q.46. Trunks are the lines that run between
(A) subscribers and exchange **(B)** switching system and power plant
(C) Local Area Network **(D)** switching systems

Ans: (B)

Q.47. Example of circuit switching and S&F (Stored and Forward) switching is
(A) Telephone and Post of Telegraph
(B) Video Signal Post or Telegraph
(C) Digital Signal Post or Telegraph
(D) None of above

Ans: (A)

Q.48. Network Layer is used for
(A) Breaking up the data in frames for transmission
(B) Deal with Error correction
(C) Automatic Recovery of Procedure
(D) Physical Architecture

Ans: (D)

Q.49. Call request signal is:
(A) Seize signal
(B) Idle state signal
(C) Line identification signal
(D) Called subscriber alert signal

Ans: (A)

Q.50. Telephone Traffic is measured in
(A) Seconds. **(B)** Hours.
(C) Erlang **(D)** Pulses per minute.

Ans: (C)

Q.51. In step by step switching line finders are connected to the
(A) Calling subscriber. **(B)** Switching network.
(C) Called subscriber. **(D)** Between exchanges.

Ans: (A)

Q.52. In a DTMF phone, digits are represented by:
(A) Orthogonal frequencies.
(B) Orthogonal Phases.
(C) Orthogonal codes.
(D) Orthogonal pulses.

Ans: (A)

Q.53. Companding helps in reducing_____with respect to signal:
(A) Interference **(B)** Signal overloading
(C) Non linearity **(D)** Quantization noise

Ans: (D)

Q.54. SS7 Protocol uses:
(A) Out of band signalling.
(B) Associated signalling.
(C) Speech control signalling.
(D) No signalling.

Ans: (A)

Q.55. MAC is the abbreviation for:
(A) Multimedia access control
(B) Media access control
(C) Mobile access control
(D) Master access point control

Ans: (B)

Q.56. The CCITT standard bandwidth for speech is:
(A) 20000 Hz **(B)** 15000 Hz
(C) 7000 Hz **(D)** 3400 Hz

Ans: (D)

Q.57. Maximum channel utilization in a LAN is defined by frame time (t_f) and propagation time (t_p). It is defined by
(A) t_p / t_f **(B)** $t_f t / p$
(C) $1 + (t_f / t_p)$ **(D)** $t_f / (t_p + t_f)$

Ans: (D)

Q.58. The function of ARQ in a network protocol is to:

(A) Auto request **(B)** Acknowledge
(C) Address request **(D)** Abort

Ans: (A)

Q.59. Engaged tone is generated in the:
(A) Telephone instrument of calling subscriber
(B) Telephone instrument of called subscriber
(C) Exchange
(D) Repeater

Ans: (C)

Q.60. One Erlang is equal to
(A) 3600 CCS
(B) 36 CCS
(C) 60 CCS
(D) 24 CCS

Ans: (A)

Q.61. The analog signal needs to be sampled at a minimum sampling rate of:
(A) 2fs **(B)** 1/(2fs)
(C) fs/2 **(D)** 2/fs

Ans: (A)

Q.62. In a time, division space switches the size of the control memory is N and its Width:
(A) $Log_{10}M$ Log_eM
(B)
(C) Log_NM Log_2M
(D)
Where N are the outlets and M the number of data samples

Ans: (It should be 2 $\log_2[N]$

Q.63. In a single stage network:
(A) There is no redundancy
(B) There is redundancy
(C) Alternative cross points are available
(D) Alternative paths are available

Ans: (B)

Q.64. Signalling transfer point (STP) exist in
(A) Strowger exchange **(B)** SS7
(C) Local area network **(D)** PABX

Ans: (B)

Q.65. ARQ is transmitted in the event of:

(A) Loss of signal **(B)** Error in received data
(C) Improve reliability **(D)** During time out

Ans: (B)

Q.66. Computer to computer communication is:
(A) Simplex **(B)** Duplex
(C) Half Duplex **(D)** Both Duplex and Half Duplex

Ans: (B)

Q.67. A distributed network configuration in which all data/information pass through a central computer is
(A) Bus network **(B)** Star network
(C) Ring network **(D)** Point to point network

Ans: (B)

Q.68. An important terminal that is required between DTE and PSTN is
(A) Server **(B)** MODEM
(C) Relay **(D)** Network card

Ans: (B)

Q.69. Traffic Handling Capacity is given by
(A) Switching capacity × Theoretical maximum load
(B) Switching capacity / Theoretical maximum load
(C) Theoretical maximum load / Switching capacity
(D) Theoretical maximum load + Switching capacity

Ans: (B)

Q.70. Traffic Intensity can be measured in
(A) Erlangs **(B)** CCS
(C) CM **(D)** All of the above

Ans: (D)

Q.71. Trunks are the lines that run between
(A) Subscribers and exchange
(B) Switching system and power plant
(C) Local area network
(D) Switching stations

Ans: (D)

Q.72. Packet switching is used for
(A) Credit card verification
(B) Automated Teller Machine
(C) The internet and the World Wide Web
(D) All of the above

Ans: (D)

Q.73. Analog signals can be _____by combining them with a carrier frequency
(A) Carried **(B)** Transported
(C) Multiplexed **(D)** Mixed

Ans: (C)

Q.74. The Signalling connection control part (SCCP) and message transfer part (MTP) together are referred to as
(A) Signal Switching Points (SSPs)
(B) Signal Transfer Points (STPs)
(C) Signal Control Points (SCPs)
(D) Network service part (NSP)

Ans: (D)

State True or False

Q.75. A two stage non-blocking network requires twice the number of switching elements as the single stage non-blocking network.
(A) TRUE **(B)** FALSE

Ans: (A)

Q.76. The larger the Grade Of Service, the worse is the service given
(A) TRUE **(B)** FALSE

Ans: (A)

Q.77. A certain amount of side tone is essential in telephone communication
(A) TRUE **(B)** FALSE

Ans: (A)

Q.78. Sky wave Communication is prone to fading
(A) TRUE **(B)** FALSE

OBJECTIVE TYPE QUESTIONS
Part 2

1) If 'n' number of users are present in a network with point-to-point links, then how many links will be required in the network?

a. n (n – 1)
b. n (n – 1) / 2
c. n (n – 1) / 4
d. n (n – 1) / 8

ANSWER: (b) n (n – 1) / 2

2) Which among the following is/are adopted by cross bar systems with hard wired control subsystem?

a. Relays
b. Latches
c. Both a and b
d. None of the above

ANSWER: (c) Both a and b

3) Which kind of switching technique indicates the transfer of coded values from input to output during the same interval of time?

a. Space Switching
b. Time Switching
c. Combination Switching
d. None of the above

ANSWER: (a) Space Switching

4) What is the hardware, used to establish connection as an electrical path between inlet and outlet pair in switching system, known as?

a. Switching Matrix
b. Switching Network
c. Both a and b
d. None of the above

ANSWER: (c) Both a and b

5) In folded type of network, ____

a. input lines are folded back to output lines
b. output lines are folded back to input lines
c. input lines are folded back to themselves (input lines)
d. output lines are folded back to themselves (output lines)

ANSWER: (b) output lines are folded back to input lines

6) The ratio of number of successful calls to the number of call attempts is known as _____

a. Call Completion Rate (CCR)
b. Call Block Rate (CBR)
c. Busy Hour Call Rate (BHCR)
d. None of the above

ANSWER: (a) Call Completion Rate (CCR)

7) If a telephone exchange serves 1500 users with the average BHCA of about 9000 and CCR is about 50%, what would be the busy hour calling rate?

a. 2
b. 3
c. 4.5
d. 5

ANSWER: (b) 3

8) How is the relation between Erlang and CCS specified?

a. 1 Erlang = 36 CCS
b. 1 Erlang = 56 CCS
c. 1 Erlang = 76 CCS
d. 1 Erlang = 96 CCS

ANSWER: (a) 1 Erlang = 36 CCS

9) Percentage of occupancy can be defined as the percentage of _____ for which the server seems to be busy.

a. speed
b. distance
c. time
d. volume

ANSWER: (c) time

10) By which name/s is the Grade of Service (GOS) well-known?

a. Call congestion
b. Time congestion
c. Both a and b
d. None of the above

ANSWER: (a) Call congestion

11) Which among the following provides TRG access to outgoing junctions through the two-stage network?

a. Expander
b. Distributor
c. Concentrator
d. Router

ANSWER: (d) Router

12) Which shape of switches are not adopted normally due to non-usability of both way trunks?

a. Circular
b. Triangular
c. Hexagonal
d. Square

ANSWER: (b) Triangular

13) In graded groups, switches with inaccessibility to the outgoing route gets ____ into the number of separate groups.

a. added
b. subtracted
c. multiplied
d. divided

ANSWER: (c) multiplied

14) Which form/s of grading design has/have the tendency to share every trunk between equal number of groups?

a. Homogeneous Grading
b. Heterogeneous Grading
c. Skipped Grading
d. All of the above

ANSWER: (a) Homogeneous Grading

15) For the two-group grading consisting of 14 trunks, availability = 5, A_k = 1.4E and the required grade of service of about 0.01, what would be its traffic capacity?

a. 4.98 E
b. 6.72 E
c. 8.3 E
d. 10 E

ANSWER: (a) 4.98 E

16) Which among the following controls the dynamic characteristics of Phase Locked Loop (PLL)?

a. Low Pass Filter
b. High Pass Filter
c. Band Pass Filter
d. Band Stop Filter

ANSWER: (a) Low Pass Filter

17) After the application of line frequency in Phase Locked Loop (PLL), at which stage do/ does the VCO frequency start to exhibit variation?

a. Free running

b. Capture
c. Phase Lock
d. All of the above

ANSWER: (b) Capture

18) What is an acceptable value of dividing point between the wander and jitter?

a. 10 Hz
b. 20 Hz
c. 50 Hz
d. 200 Hz

ANSWER:(a) 10 Hz

19) If the voltage controlled by VCO exhibits variation at faster and rapid rate, then the instability of clock is known as _____

a. Clock wander
b. Clock jitter
c. Clock frequency
d. Clock period

ANSWER: (b) Clock jitter

20) Which theorem in random jitter specifies the composite effect of various uncorrelated noise sources despite the distribution approaches to Gaussian distribution?

a. Initial Value Theorem
b. Final Value Theorem
c. Central Limit Theorem
d. None of the above

ANSWER: (c) Central Limit Theorem

21) Which type of data network supports the interconnection of computers within highly populated area?

a. LAN
b. WAN
c. MAN
d. None of the above

ANSWER: (c) MAN

22) Which among the following is/are supported by LAN?

a. PABX
b. PSTN
c. SBDN
d. All of the above

ANSWER: (a) PABX

23) If the voice channel is free in PSTN, then what would be the maximum data rate supported by 3.1 kHz bandwidth of voice channel?

a. 2000 bps
b. 4000 bps
c. 6000 bps
d. 8000 bps

ANSWER: (c) 6000 bps

24) In Phase Shift Keying, how many bit/s is/are allowed to be transmitted per shift?

a. 1
b. 2
c. 4
d. 8

ANSWER: (b) 2

25) Which among the following utilizes the transmission line upto 85 – 95 %?

a. Voice Traffic
b. Data Traffic
c. Both a and b
d. None of the above

ANSWER: (a) Voice Traffic

26) If the system is designed with the usage of hexagonal-shaped cells, how are the base-stations located?

a. At the centre of cell

b. At the edge of cell
c. At the corner of the cell
d. All of the above

ANSWER: (d) All of the above

27) Which antennas are used at the center of the cells for the system with hexagonal-shaped cells?

a. Omni-directional antennas
b. Sectored directional antennas
c. Both a and b
d. None of the above

ANSWER: (a) Omni-directional antennas

28) In a cellular telephone system, which type of interference results from imperfect design of filters in receivers by allowing nearby frequencies to enter the receiver?

a. Co-channel Interference
b. Adjacent-channel Interference
c. Both a and b
d. None of the above

ANSWER: (b) Adjacent-channel Interference

29) Which effect is widespread in adjacent-channel interference especially after the reception of a weak signal by a mobile user from the base-station?

a. Near-far effect
b. Doppler's effect
c. Capture effect
d. Kendall effect

ANSWER: (a) Near-far effect

30) Which method of cellular network assists in minimizing the co-channel interference associated with the angle of degree?

a. Cell Splitting
b. Cell Sectoring
c. Cell Segmentation & Dualization
d. None of the above

ANSWER: (b) Cell Sectoring

31) Which type of connection takes place between an incoming trunk and an outgoing trunk?

a. Local call
b. Outgoing call
c. Incoming call
d. Transit call

ANSWER: (d) Transit call

32) In message switching system, an incoming message gets ____ especially if the required route is busy.

a. lost
b. stored in a queue & retransmitted
c. sampled
d. recovered

ANSWER: (b) stored in a queue & retransmitted

33) Which type of switching network involves the establishment of a dedicated path between two stations?

a. Message Switching
b. Packet Switching
c. Circuit Switching
d. Manual Switching

ANSWER: (c) Circuit Switching

34) In packet switching, what does the header of each short size of packet consist of?

a. Source address
b. Destination address
c. Intermediate nodes
d. All of the above

ANSWER: (d) All of the above

35) In manual switching, which kind of battery exchange has the provision of subscribers set along with

magneto generator?

a. Local battery exchange

b. Central battery exchange

c. Both a and b

d. None of the above

ANSWER: (a) Local battery exchange

36) If a group of trunks is offered 1200 calls during the busy hour & 20 calls are lost along with the average call duration of about 7 min, then what would be the total duration of congestion period?

a. 21.6 sec

b. 42.2 sec

c. 57.6 sec

d. 98.2 sec

ANSWER: (c) 57.6 sec

37) In analyzing the traffic performance, how is the number of trunk decided with the provision of the Grade of Service (GoS) especially for larger group?

a. By normal load condition

b. By overload condition

c. By underload condition

d. None of the above

ANSWER: (b) By overload condition

38) If the queuing systems are connected in tandem configuration, what would be the nature of delay?

a. Commutative

b. Distributive

c. Cumulative

d. Deductive

ANSWER: (c) Cumulative

39) Which type of holding time distribution is assumed for the voice conversation on telephone?

a. Constant

b. Exponential

c. Both a and b

d. None of the above

ANSWER: (b) Exponential

40) Which model of loss system allows the usage of Poisson distribution model for traffic analysis especially by assuming infinite number of users?

a. Lost Calls Cleared (LCC)

b. Lost Calls Returned (LCR)

c. Lost Calls Held (LCH)

d. None of the above

ANSWER: (a) Lost Calls Cleared (LCC)

41) In two-stage network, which phenomenon/situation occurs due to impossible connectivity of given incoming trunk to selected outgoing trunk specifically because of link utilization for other connection between primary and secondary switches?

a. Bursting

b. Blinking

c. Blocking

d. Burning

ANSWER: (c) Blocking

42) Which kind of switching system does not comprise any subscriber, concentrator or expander?

a. Crossbar

b. Director Exchange

c. Strowger

d. Tandem

ANSWER: (d) Tandem

43) By how many times does the time division exchange exhibit connection and disconnection with respect to every millisecond, due to its ability of using rearrangeable networks?

a. 2

b. 4

c. 8
d. 16

ANSWER: (c) 8

44) Which signals are regarded as call-progress signals as they are sent back to inform the caller about the progress of the call?

a. Address Signals
b. Status Signals
c. Call request Signals
d. Answer Signals

ANSWER: (b) Status Signals

45) Which among the following exhibit/s the necessity of trunks during the signalling mechanism?

a. In channel Signalling
b. Common Channel Signalling
c. Both a and b
d. None of the above

ANSWER: (a) In channel Signalling

46) Phase jitter is generated by an additive noise on a _____sinusoidal wave.

a. continuous
b. sampled
c. discrete
d. distorted

ANSWER: (a) continuous

47) What is /are the purpose/s of pulse stuffing in an asynchronous multiplexing?

a. Removal of slips & the need for clock synchronization
b. Usability of output channel with higher rate than input
c. Creation of timing adjustments
d. All of the above

ANSWER: (d) All of the above

48) In digital network synchronization, which approach indicates the cost burden carrying of highly accurate and redundant timing sources by means of smaller switching nodes?

a. Packetization
b. Master Slave Clocking
c. Network Wide Pulse Stuffing
d. Plesiochronous Network

ANSWER: (d) Plesiochronous Network

49) If the desired connection has a low completion probability, which type of flow control technique is used for eliminating the capture of common resources?

a. Trunk Directionalization
b. Cancellation of Alternate Routing
c. Code Blocking
d. Centralized Connection Control

ANSWER: (d) Centralized Connection Control

50) In network management, managing the rate at which the traffic enters a network is known as _____

a. Flow control
b. Routing control
c. Data control
d. All of the above

ANSWER: (a) Flow control

51) Which among the following can be adopted as a dedicated path between the source and destination in circuit switching?

a. Physical Wire
b. Radio Link
c. Co-axial Cable
d. All of the above

ANSWER: (d) All of the above

52) The transfer of user messages from node to another by means of store and forward switching network is known as _____

a. jitter
b. scaling
c. hop
d. entity

ANSWER: (c) hop

53) Consider the statements given below. Which among them represents the operational step executed in datagram Packet Switched Network?

a. Fixed Path is assigned between nodes from source to destination
b. First Come First Serviced basis is applicable
c. Necessity of an identifier for a connection between source host & destination host
d. Transmission of short messages of one or two packet length

ANSWER: (d) Transmission of short messages of one or two packet lengths

54) In Protocol Data Units (PDUs), where do/does the data get/s interchanged?

a. Between peer entities
b. Between entities of neighbouring layers
c. Between 'N' & 'N+1' layers
d. All of the above

ANSWER: (a) Between peer entities

55) Which type of framing technique/s reduce/s the problem of synchronization of the receiver?

a. Character Count
b. Character Stuffing
c. Bit Stuffing
d. All of the above

ANSWER: (b) Character Stuffing

56) If a greater number of cells are necessary in the frequency reuse distance, then the segmentation & dualization techniques get _____

a. united
b. divided
c. restricted
d. filtered

ANSWER: (a) united

57) Which hand-off stage deals with the relinquishment of unnecessary frequency channels by keeping the availability for other mobile users?

a. Initialization
b. Resource Reservation
c. Call Execution
d. Call Completion

ANSWER: (d) Call Completion

58) Which among the following represents the flawless hand-off with no perceivable interruption of service?

a. Hard hand-off
b. soft hand-off
c. Intracell hand-off
d. Intercell hand-off

ANSWER: (b) Soft hand-off

59) In cellular telephone network, which component controls the switching between public wireline telephone network and the base station of cells for supporting the different calls between landline to mobile, mobile to landline and mobile to mobile calls?

a. Electronic Switching Centre (ESC)
b. A Cell Controller
c. Radio Transmitter & Receiver
d. A common communication protocols

ANSWER: (a) Electronic Switching Centre (ESC)

60) In Electronic Switching Centre (ESC), the transmission rate of X.25 protocol is ____9.6 Kbps.

a. Less than
b. Equal to
c. Greater than

d. None of the above

ANSWER: (c) Greater than