Unit 3

1.	*The sharing of a medium and its link by two or more devices is called _____* *a) Fully duplexing* ***b) Multiplexing*** *c) Both Fully duplexing and Multiplexing* *d) Duplexing*	*L2*	*B*
2.	*Multiplexing is used in _____* *a) Packet switching* ***b) Circuit switching*** *c) Data switching* *d) Packet & Circuit switching*	*L1*	*B*
3.	*Which multiplexing technique transmits digital signals?* *a) FDM* ***b) TDM*** *c) WDM* *d) FDM & WDM*	*L2*	*B*
4.	*If there are n signal sources of same data rate than TDM link has _____ slots.* ***a) n*** *b) n/2* *c) n*2* *d) 2^n*	*L4*	*A*
5.	*If link transmits 4000frames per second, and each slot has 8 bits, the transmission rate of circuit this TDM is _____* ***a) 32kbps*** *b) 500bps* *c) 500kbps* *d) None of the mentioned*	*L4*	*A*
6.	*The state when dedicated signals are idle are called _____* *a) Death period* *b) Poison period* ***c) Silent period*** *d) None of the mentioned*	*L4*	*C*
7.	*In TDM, the transmission rate of the multiplexed path is usually _____ the sum of the*	*L2*	*A*

	transmission rates of the signal sources. ***a) Greater than*** *b) Lesser than* *c) Equal to* *d) Equal to or greater than*		
8.	*In TDM, slots are further divided into _____* *a) Seconds* ***b) Frames*** *c) Packets* *d) None of the mentioned*	*L3*	*B*
9.	*Physical or logical arrangement of network is _____* ***a) Topology*** *b) Routing* *c) Networking* *d) None of the mentioned*	*L1*	*A*
10.	*In which topology there is a central controller or hub?* ***a) Star*** *b) Mesh* *c) Ring* *d) Bus*	*L1*	*A*
11.	*This topology requires multipoint connection* *a) Star* *b) Mesh* *c) Ring* ***d) Bus***		
12.	*Data communication system spanning states, countries, or the whole world is _____* *a) LAN* ***b) WAN*** *c) MAN* *d) None of the mentioned*		
13.	*Data communication system within a building or campus is_____* ***a) LAN*** *b) WAN* *c) MAN* *d) None of the mentioned*		
14.	*WAN?* *a) World area network* ***b) Wide area network***		

	c) Web area network *d) None of the mentioned*		
15.	*TDM, slots are further divided into _____* *a) Seconds* ***b) Frames*** *c) Packets* *d) None of the mentioned*		
16.	*Multiplexing technique that shifts each signal to a different carrier frequency* ***a) FDM*** *b) TDM* *c) Both FDM & TDM* *d) None of the mentioned*		
17.	*The attackers a network of compromised devices known as* *a) Internet* *b) Botnet* *c) Telnet* *d) D-net* *Answer: b*		
18.	*Which of the following is a form of DoS attack ?* *a) Vulnerability attack* *b) Bandwidth flooding* *c) Connection flooding* *d) All of the mentioned* *Answer: d*		
19.	*The DoS attack is which the attacker establishes a large number of half-open or fully open TCP connections at the target host* *a) Vulnerability attack* *b) Bandwidth flooding* *c) Connection flooding* *d) All of the mentioned* *Answer: c*		
20.	*The DoS attack is which the attacker sends deluge of packets to the targeted host* *a) Vulnerability attack* *b) Bandwidth flooding* *c) Connection flooding* *d) All of the mentioned* *Answer: b*		

21.	*Packet sniffers involve* *a) Active receiver* *b) Passive receiver* *c) Both Active receiver and Passive receiver* *d) None of the mentioned* *Answer: b* *Explanation: They donot inject packets into the channel.*		
22.	*Sniffers can be deployed in* *a) Wired environment* *b) WiFi* *c) Ethernet LAN* *d) All of the mentioned* *Answer: d*		
23.	*Firewalls are often configured to block* *a) UDP traffic* *b) TCP traffic* *c) Both of the mentioned* *d) None of the mentioned* *Answer: a*		
24.	*In a network, If P is the only packet being transmitted and there was no earlier transmission, which of the following delays could be zero* *a) Propogation delay* *b) Queuing delay* *c) Transmission delay* *d) Processing delay* *Answer: b*		
25.	*Which of this is not a guided media?* *a) Fiber optical cable* *b) Coaxial cable* *c) Wireless LAN* *d) Copper wire* *Answer: c* *Explanation: Wireless LAN is unguided media.*		
26.	*is commonly used in* _____ *a) DSL* *b) FTTP* *c) HTTP* *d) None of the mentioned*		

	Answer: a *Explanation: Unshielded twisted pair(UTP) is commonly used in home access.*		
27.	*Coaxial cable consists of _____ concentric copper conductors.* *a) 1* *b) 2* *c) 3* *d) 4* *Answer: b* *Explanation: Coaxial cable has an inner conductor surrounded by a insulating layer, which is surrounded by a conducting shield. Coaxial cable is used to carry high frequency signals with low losses.*		
28.	*Fiber optics posses following properties _____* *a) Immune electromagnetic interference* *b) Very less signal attenuation* *c) Very hard to tap* *d) All of the mentioned* *Answer: d* *Explanation: In fibre optics the transmission of information is in the form of light or photons. Due to all above properties mentioned in options fibre optics can be submerged in water and are used at more risk environments.*		
29.	*If an Optical Carrier is represented as OC-n, generally the link speed equals(in Mbps) _____* *a) n*39.8* *b) n*51.8* *c) 2n*51.8* *d) None of the mentioned* *Answer: b* *Explanation: The base unit of transmission rates in optical fibre is 51.8 Mbits/s. So an optical carrier represented as*		

	*OC-n has n*51.8 Mbits/s transmission speed. For eg. OC-3 has 3*51.8 Mbits/s speed.*		
30.	*Terrestrial radio channels are broadly classifed into _____ groups.* *a) 2* *b) 3* *c) 4* *d) 1* *Answer: b* *Explanation: The three types are those that operate over very short distance, those that operate in local areas, those that operate in the wide area.*		
31.	*Radio channels are attractive medium because _____* *a) Can penetrate walls* *b) Connectivity can be given to mobile user* *c) Can carry signals for long distance* *d) All of the mentioned* *Answer: d* *Explanation: Radio channels can penetrate walls, can be used to provide connectivity to mobile users and can also carry signals for long distances.*		
32.	*Geostationary satellites _____* *a) Are placed at a fixed point above the earth* *b) Rotate the earth about a fixed axis* *c) Rotate the earth about a varying axis* *d) All of the mentioned* *Answer: a* *Explanation: They are placed in orbit at 36,000km above Earth's surface.*		
33.	*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 device that allows wireless devices to connect to a wired network and wireless devices itself* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
34.	*In wireless ad-hoc network* *a) access point is not required* *b) access point is must* *c) nodes are not required* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
35.	*multiple access technique is used by IEEE 802.11 standard for wireless LAN?* *a) CDMA* *b) CSMA/CA* *c) ALOHA* *d) None of the mentioned* *Answer: b* *Explanation: None.*		
36.	*In wireless distribution system* *a) multiple access point are inter-connected with each other* *b) there is no access point* *c) only one access point exists* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
37.	*A wireless network interface controller can work in* *a) infrastructure mode* *b) ad-hoc mode* *c) both infrastructure mode and ad-hoc mode* *d) none of the mentioned* *Answer: c* *Explanation: In infrastructure mode WNIC needs access point but in ad-hoc mode access point is not required.*		
38.	*In wireless network an extended service set is a set of* *a) connected basic service sets*		

	b) all stations *c) all access points* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
39.	*Mostly _____ is used in wireless LAN.* *a) time division multiplexing* *b) orthogonal frequency division multiplexing* *c) space division multiplexing* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
40.	*Which one of the following event is not possible in wireless LAN.* *a) collision detection* *b) acknowledgement of data frames* *c) multi-mode data transmission* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
41.	*What is Wired Equivalent Privacy (WEP) ?* *a) security algorithm for ethernet* *b) security algorithm for wireless networks* *c) security algorithm for usb communication* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
42.	*What is WPA?* *a) wi-fi protected access* *b) wired protected access* *c) wired process access* *d) wi-fi process access* *Answer: a* *Explanation: None.*		
43.	*An interconnected collection of piconet is called* *a) scatternet* *b) micronet*		

	c) mininet *d) none of the mentioned* *Answer: a* *Explanation: Piconet is the basic unit of bluetooth system having a master node and upto seven active slave nodes.*		
44.	*In a piconet, there can be up to _____ parked nodes in the net.* *a) 63* *b) 127* *c) 255* *d) 511* *Answer: c* *Explanation: None.*		
45.	*Bluetooth is the wireless technology for* *a) local area network* *b) personal area network* *c) both local area network and personal area network* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
46.	*Bluetooth uses* *a) frequency hoping spread spectrum* *b) orthogonal frequency division multiplexing* *c) time division multiplexing* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
47.	*Unauthorised access of information from a wireless device through a bluetooth connection is called* *a) bluemaking* *b) bluesnarfing* *c) bluestring* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
48.	*What is A2DP (advanced audio distribution profile)?* *a) a bluetooth profile for*		

	streaming audio *b) a bluetooth profile for streaming video* *c) a bluetooth profile for security* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
49.	*In the piconet of bluetooth one master device* *a) can not be slave* *b) can be slave in another piconet* *c) can be slave in the same piconet* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
50.	*Bluetooth transceiver devices operate in _____ band.* *a) 2.4 GHz ISM* *b) 2.5 GHz ISM* *c) 2.6 GHz ISM* *d) 2.7 GHz ISM* *Answer: a* *Explanation: None.*		
51.	*The bluetooth supports* *a) point-to-point connections* *b) point-to-multipoint connection* *c) both point-to-point connections and point-to-multipoint connection* *d) none of the mentioned* *Answer: c* *Explanation: None.*		
52.	*A scatternet can have maximum* *a) 10 piconets* *b) 20 piconets* *c) 30 piconets* *d) 40 piconets* *Answer: a* *Explanation: None.*		
53.	*SONET stands for* *a) synchronous optical network* *b) synchronous operational*		

	network *c) stream optical network* *d) shell operational network* *Answer: a* *Explanation: None.*		
54.	*In SONET, STS-1 level of electrical signalling has the data rate of* *a) 51.84 Mbps* *b) 155.52 Mbps* *c) 466.56 Mbps* *d) none of the mentioned* *Answer: a* *Explanation: None.*		
55.	*path layer of SONET is responsible for the movement of a signal* *a) from its optical source to its optical destination* *b) across a physical line* *c) across a physical section* *d) none of the mentioned* *Answer: b* *Explanation: None.*		
56.	*photonic layer of the SONET is similar to the _____ of OSI model.* *a) network layer* *b) data link layer* *c) physical layer* *d) none of the mentioned* *Answer: c* *Explanation: None.*		
57.	*SONET, each synchronous transfer signal STS-n is composed of* *a) 2000 frames* *b) 4000 frames* *c) 8000 frames* *d) 16000 frames* *Answer: c* *Explanation: None.*		
58.	*one of the following is not true about SONET?* *a) frames of lower rate can be synchronously time-division multiplexed into a higher-rate*		

	frame *b) multiplexing is synchronous TDM* *c) all clocks in the network are locked to a master clock* *d) none of the mentioned* *Answer: d* *Explanation: None.*		
59.	*linear SONET network can be* *a) point-to-point* *b) multi-point* *c) both point-to-point and multi-point* *d) none of the mentioned* *Answer: c* *Explanation: None.*		
60.	*Automatic protection switching in linear network is defined at the* *a) line layer* *b) section layer* *c) photonic layer* *d) path layer* *Answer: a* *Explanation: None.*		
61.	*A unidirectional path switching ring is a network with* *a) one ring* *b) two rings* *c) three rings* *d) four rings* *Answer: b* *Explanation: One ring is used as the working ring and other as the protection ring.*		
62.	*What is SDH?* *a) sdh is similar standard to SONET developed by ITU-T* *b) synchronous digital hierarchy* *c) both sdh is similar standard to SONET developed by ITU-T and synchronous digital hierarchy* *d) none of the mentioned* *Answer: c* *Explanation: None.*		

63.	*Which of this is not a guided media?* *a) Fiber optical cable* *b) Coaxial cable* *c) Wireless LAN* *d) Copper wire* *Answer: c* *Explanation: Wireless LAN is unguided media.*		
64.	*. UTP is commonly used in _____* *a) DSL* *b) FTTP* *c) HTTP* *d) None of the mentioned* *Answer: a* *Explanation: Unshielded twisted pair(UTP) is commonly used in home access.*		
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	above the earth *b) Rotate the earth about a fixed axis* *c) Rotate the earth about a varying axis* *d) All of the mentioned* *Answer: a* *Explanation: They are placed in orbit at 36,000km above Earth's surface.*		
71.	*A local telephone network is an example of a _____ network.* *a) Packet switched* *b) Circuit switched* *c) Both Packet switched and Circuit switched* *d) Line switched* *Answer: b* *Explanation: Circuit switching is connection oriented switching technique. Whereas in the case of packet switching, it is connectionless. Circuit switching is implemented in the Physical layer, whereas packet switching is implemented in the Network layer.*		
72.	*Most packet switches use this principle _____* *a) Stop and wait* *b) Store and forward* *c) Both Stop and wait and Store and forward* *d) Stop and forward* *Answer: b* *Explanation: The packet switch will not transmit the first bit to outbound link until it receives the entire packet.*		
73.	*If there are N routers from source to destination, a total end to end delay in sending packet P(L-> number of bits in the packet R-> transmission rate)* *a) N* *b) (N*L)/R* *c) (2N*L)/R*		

	d) L/R *Answer: b* *Explanation: The equation to find the end to end delay when no. of bits, transmission rate and no. of routers is given by (N*L)/R.*		
74.	*What are the Methods to move data through a network of links and switches?* *a) Packet switching* *b) Circuit switching* *c) Line switching* *d) Both Packet switching and Circuit switching* *Answer: d* *Explanation: Packet switching and Circuit switching are two different types of switching methods used to connect the multiple communicating devices with one another.*		
75.	*The resources needed for communication between end systems are reserved for the duration of the session between end systems in _____* *a) Packet switching* *b) Circuit switching* *c) Line switching* *d) Frequency switching* *Answer: b* *Explanation: In circuit switching, a physical path between the sender and receiver is established. This path is maintained until the connection is needed.*		
76.	*As the resouces are reserved between two communicating end systems in circuit switching, this is achieved _____* *a) authentication* *b) guaranteed constant rate* *c) reliability* *d) store and forward* *Answer: b* *Explanation: Circuit switching is*		

	connection oriented and is always implemented in the physical layer. Once a path is set, all transmission occurs through the same path.		
77.	*In _____ resources are allocated on demand.* *a) packet switching* *b) circuit switching* *c) line switching* *d) frequency switching* *Answer: a* *Explanation: In packet switching, the bits are received in out of order and need to be assembled at the receiver end. Whereas in the case of Circuit switching, all the bits are received in order.*		
78.	*Which of the following is an application layer service?* *a) Network virtual terminal* *b) File transfer, access, and management* *c) Mail service* *d) All of the mentioned*		
	Answer: d *Explanation: Network virtual terminal, mail service, file transfer, access and management are all services of an application layer.*		
79.	*_____ allows LAN users to share computer programs and data.* *a) Communication server* *b) Print server* *c) File server* *d) Network* *Answer: c* *Explanation: File server allows LAN users to share computer programs and data.*		
80.	*STP stands for* *a) Shielded twisted pair cable* *b) Spanning tree protocol* *c) Static transport protocol*		

	d) None of the mentioned *Answer: a* *Explanation: STP stands for Shielded twisted pair cable.*		
81.	*A standalone program that has been modified to work on a LAN by including concurrency controls such as file and record locking is an example of _____* *a) LAN intrinsic software* *b) LAN aware software* *c) Groupware* *d) LAN ignorant software* *Answer: a* *Explanation: A standalone program that has been modified to work on a LAN by including concurrency controls such as file and record locking is an example of LAN intrinsic software.*		
82.	*The _____ portion of LAN management software restricts access, records user activities and audit data etc.* *a) Configuration management* *b) Security management* *c) Performance management* *d) None of the mentioned* *Answer: b* *Explanation: The Security management portion of LAN management software restricts access, records user activities and audit data etc.*		
83.	*What is the max cable length of STP?* *a) 100 ft* *b) 200 ft* *c) 100 m* *d) 200 m* *Answer: d* *Explanation: 200m is the max cable length of STP.*		
84.	*What is the max data capacity of STP?* *a) 10 mbps*		

	b) 100 mbps *c) 1000 mbps* *d) 10000 mbps* *Answer: b* *Explanation: 100 mbps is the max data capacity of STP.*		
85.	*Which connector STP uses?* *a) BNC* *b) RJ-11* *c) RJ-45* *d) RJ-69* *Answer: c* *Explanation: RJ-45 is used for STP cable.*		
86.	*What is the central device in star topology?* *a) STP server* *b) Hub/switch* *c) PDC* *d) Router* *Answer: b* *Explanation: Hub/switch is the central device in star topology.*		
87.	*What is max data capacity for optical fiber cable?* *a) 10 mbps* *b) 100 mbps* *c) 1000 mbps* *d) 10000 mbps* *Answer: c* *Explanation: 1000 mbps is max data capacity for optical fiber cable.*		
88.	*Which of the following architecture uses CSMA/CD access method?* *a) ARC net* *b) Ethernet* *c) Router* *d) STP server* *Answer: b* *Explanation: Ethernet uses CSMA/CD access method.*		