Q=QUESTION	question_description	question_explanation	question_type	question_difficulty
A=ANSWER	answer_description	answer_explanation	answer_isright	answer_position
Q	ATM networks are		M	1
A	connection less		0	1
B	interworking		0	2
C	connection oriented		1	3
D	internetworking		0	4
Q	DHCP stands for		M	1
A	Dynamic host configuration protocol		1	1
B	Digital host communication protocol		0	2
C	Dynamic host communication provider		0	3
D	Digital host configuration protocol		0	4
Q	Which topology forms circle in point to point links		M	1
A	ring		1	1
B	bus		0	2
C	tree		0	3
D	mesh		0	4
Q	Which protocol layer uses WWW, email etc.		M	1
A	session		0	1
B	transport		0	2
C	network point set		0	3
D	application		1	4
Q	Virtual circuit and datagram are sub caetgories are		M	1
A	message switched networks		0	1
B	packet switched networks		1	2
C	circuit switched networks		0	3
D	data request		0	4
Q	Three methods of switching are		M	1

A	circuit, packet and protocol switching			0	1
B	circuit, packet and message switching			1	2
C	loop, packet and message switching			0	3
D	node, packet and message switching			0	4
Q	TCP/IP model does not have this layer but OSI model have this layer		M		1
A	transport layer			0	1
B	session layer			1	2
C	application layer			0	3
D	network layer			0	4
Q	Transmission data rate is decided by		M		1
A	network layer			0	1
B	physical layer			1	2
C	data link layer			0	3
D	transport layer			0	4
Q	The largest professional engineering society in world is		M		1
A	ANSI			0	1
B	EIA			0	2
C	IEEE			1	3
D	ISO			0	4
Q	A device that helps prevent congestion and data collisions		M		1
A	Hub			0	1
B	Switch			1	2
C	Router			0	3
D	Gateway			0	4
Q	A device that is used to connect a number of LANs is		M		1
A	Repeater			0	1
B	Hub			0	2
C	Switch			0	3

D	Router			1	4
Q	Frames from one LAN can be transmitted to another LAN via the device		M		1
A	Router			0	1
B	Bridge			1	2
C	Switch			0	3
D	Repeater			0	4
Q	Which of the sensor is used for monitoring brain activity in WBAN		M		1
A	EMG sensor			0	1
B	ECG sensor			0	2
C	Tilt sensor			0	3
D	EEG sensor			1	4
Q	Which of the following statement about scattering is incorrect		M		1
A	Scattering occurs when the number of obstacles per unit volume is small			1	1
B	Scattered waves are produced by irregularities in the channel			0	2
C	It is one of the various wireless communication problems			0	3
D	Scattered waves are produced by rough surfaces			0	4
Q	Which protocol handles link establishment between the devices		M		1
A	Baseband			0	1
B	L2CAP			0	2
C	LMP			1	3
D	RFComm			0	4
Q	Which standard is proposed for coexistance with other wired devices		M		1

A	IEEE 802.15.1			0	1
B	IEEE 802.15.2			1	2
C	IEEE 802.15.4			0	3
D	IEEE 802. 15. 3			0	4
Q	Which of the following is not true for UWB		M		1
A	Large bandwidth			0	1
B	Low price			0	2
C	Narrow pulses			0	3
D	large distance			1	4
Q	Which one is not a requirement of WPAN		M		1
A	low cost			0	1
B	long life			0	2
C	small size			0	3
D	Large size			1	4
Q	Which of the following is not true for Active tags of RFID		M		1
A	More expensive			0	1
B	Inbuilt battery			0	2
C	Limited lifeperiod			0	3
D	small range			1	4
Q	IEEE 802.15 MAC layer uses which channel access mechanism		M		1
A	CSMA			0	1
B	CSMA-CA			1	2
C	OFDM			0	3
D	TDMA			0	4
Q	Which of the following is not an application of Star topology in ZigBee		M		1
A	Home- automation			0	1
B	Personal computer and peripherals			0	2

C	Games			0	3
D	Industrial control and monitoring			1	4
Q	Types of ZigBee devices are		M		1
A	FFD			0	1
B	RFD			0	2
C	Both RFD and FFD			1	3
D	Neither RFD nor FFD			0	4
Q	Which of the following is not an application of Mesh topology in ZigBee		M		1
A	Home- automation			1	1
B	Wireless sensor networks			0	2
C	Inventory tracking			0	3
D	Industrial control and monitoring			0	4
Q	What is the frequency range of UHF RFID		M		1
A	3-30 Mhz			0	1
B	30-300 Khz			0	2
C	300 Mhz- 3 Ghz			1	3
D	500Hz			0	4
Q	The typical frequency hopping rate of Bluetooth is		M		1
A	1000 hops/sec			0	1
B	2500 hops/sec			0	2
C	1500 hops/sec			0	3
D	1600 hops/sec			1	4
Q	A scatternet is a collection of		M		1
A	One master and slave			0	1
B	only master			0	2
C	Piconets			1	3
D	only slaves			0	4

Q	There can be upto_____parked slave devices in a single piconet		M		1
A	125			0	1
B	255			1	2
C	8			0	3
D	7			0	4
Q	A scatternet in Bluetooth can have_____Piconets		M		1
A	2-10 piconets			1	1
B	20 piconets			0	2
C	30 piconets			0	3
D	40 piconets			0	4
Q	L2CAP layer implements		M		1
A	Flow control			0	1
B	Multiplexing			1	2
C	Authentication			0	3
D	Encryption			0	4
Q	A peer-to-peer network cannot be		M		1
A	Self organising			0	1
B	Self- healing			0	2
C	Adhoc			0	3
D	Virtual			1	4
Q	In a piconet, each of the slave has an assigned_____ address		M		1
A	5- bit			0	1
B	7- bit			0	2
C	3- bit			1	3
D	8- bit			0	4
Q	Unauthorised access of information from a wireless device through a bluetooth connection is called		M		1

A	Bluemaking			0	1
B	Bluesnarfing			1	2
C	Blueprinting			0	3
D	Bluecopying			0	4
Q	What is the worldwide range of ISM band		M		1
A	2.4 Ghz			1	1
B	15 Ghz			0	2
C	5MHz			0	3
D	10.8 Ghz			0	4
Q	Which of the following statement is correct for a master in a Piconet		M		1
A	can not be slave			0	1
B	can be slave in another piconet			1	2
C	can be slave in the same piconet			0	3
D	can be master in another piconet			0	4
Q	Bluetooth supports		M		1
A	point-to-point connections			0	1
B	point-to-multipoint connection			0	2
C	both point-to-point connections and point-to-multipoint connection			1	3
D	multipoint to point connection			0	4
Q	Telephony control specification is		M		1
A	Bit oriented protocol			1	1
B	Byte- oriented protocol			0	2
C	Nibble			0	3
D	Megabyte oriented				
Q	MAC protocols of HIPERLAN2 uses		M		1
A	distributed access			0	1
B	centrally access			1	2

C	random access			0	3
D	multiple access			0	4
Q	Determine the transfer data rate of a 40 Kb file with an 802.11 WLAN operating at 2 Mbps		M		1
A	160ms			0	1
B	80ms			1	2
C	320ms			0	3
D	100ms			0	4
Q	What will be size of a file in 802.11 WLAN operating at 1 Mbps, if the time taken to transfer the file is 75ms		M		1
A	25 kb			0	1
B	55 kb			0	2
C	40 kb			0	3
D	75 kb			1	4
Q	_____ provides the mechanism for one station to prove it's identity to another station in the WLAN		M		1
A	Authentication			1	1
B	Association			0	2
C	Synchronization			0	3
D	Scanning			0	4
Q	_____ is the mechanism through which IEEE802.11 provides transparent mobility to stations		M		1
A	Encryption			0	1
B	Association			1	2
C	Verification			0	3
D	Scanning			0	4
Q	Which of the following is the IEEE standard for WLAN		M		1
A	802.3			0	1
B	802.11			1	2

C	802.15			0	3
D	802.16			0	4
Q	IEEE 802.11b offers maximum speed of		M		1
A	11Mbps			1	1
B	22Mbps			0	2
C	33Mbps			0	3
D	44Mbps			0	4
Q	The process of a station in BSS of getting in step with each other, so that reliable communication is possible		M		1
A	Verification			0	1
B	Scanning			0	2
C	Synchronization			1	3
D	Network management			0	4
Q	MPEG can be abbreviated as		M		1
A	Moving picture expert group			1	1
B	Motion picture expert graphics			0	2
C	Moving picture export group			0	3
D	Motion picture export graphics			0	4
Q	_____ is the process of finding another station or AP		M		1
A	Authentication			0	1
B	Network allocation			0	2
C	Association			0	3
D	Scanning			1	4
Q	The networks which cover a distance of 10-500m are called		M		1
A	WLAN			1	1
B	WWAN			0	2
C	WMAN			0	3
D	WSN			0	4

Q	Transferring of the packets between the networks is done by		M		1
A	Router			1	1
B	Access point			0	2
C	BSS			0	3
D	ESS			0	4
Q	The method of moving data over regular telephone lines is		M		1
A	DSL			1	1
B	Adhoc networks			0	2
C	virtual networks			0	3
D	HIPERLAN			0	4
Q	The AP is the wireless equivalent of a wired LAN		M		1
A	Switch			0	1
B	Repeater			0	2
C	Hub			1	3
D	Amplifier			0	4
Q	The recommended internet protocol designed to support the mobility of an MH is		M		1
A	Mobile Internet Protocol (IP)			1	1
B	Poll and esponse protocol			0	2
C	WEP			0	3
D	Network allocation Vector(NAV)			0	4
Q	Which of the following topology is supported by IEEE802.11		M		1
A	Independent BSS (IBSS)			0	1
B	BSS, infrastructure mode			0	2
C	Extended BSS (EBSS)			0	3
D	All of the above			1	4
Q	WMAN-OFDM PHY layer is the version of		M		1

A	12 point OFDM			0	1
B	24 point OFDM			0	2
C	125 point OFDM			0	3
D	256 point OFDM			1	4
Q	Which of the following technique is used in adaptive antenna system?		M		1
A	TDMA			0	1
B	FDMA			0	2
C	SDMA			1	3
D	OFDMA			0	
Q	IEEE 802.16 MAC is designed for		M		1
A	P2P			0	1
B	P2MP			1	2
C	MP2P			0	3
D	MP2MP			0	4
Q	Subchannelization is a key concept for		M		1
A	WiFi			0	1
B	WiMAX			1	2
C	WMAN			0	3
D	WWAN			0	4
Q	A high-level QoS and scheduling support is function of		M		1
A	WiFi			0	1
B	WiMAX			1	2
C	WMAN			0	3
D	WWAN			0	4
Q	The technologies that support broadband wireless networks		M		1
A	WLL			0	1
B	LMDS			0	2
C	WLL, LMDS, MMDS, Wireless ATM			1	3

D	ATM			0	
Q	The acronym for LMDS is		M		1
A	Local multipoint distributed service			1	1
B	Local multilevel distributed service			0	2
C	Local multipoint disturbed service			0	3
D	Multipoint distributed system			0	4
Q	The network supporting broadband multimedia services are		M		1
A	WLL			0	1
B	LMDS			0	2
C	MMDS			0	3
D	Wireless ATM			1	4
Q	Wireless wide area uses which network topologies?		M		1
A	GSM			0	1
B	CDMA			0	2
C	UMTS			0	3
D	GSM, CDMA, GPRS, UMTS and CDPD			1	4
Q	Service types offered by a satellite are		M		1
A	Fixed service satellite			0	1
B	Mobile service satellite			0	2
C	Broadcast service satellite			0	3
D	Fixed, mobile and broadcast service			1	
Q	Type of service which is not for Internet access is		M		1
A	Fixed			0	1
B	Portable			0	2
C	Complex			1	3
D	Mobile			0	4
Q	The wireless network planning is divided into --- phases		M		1
A	one			0	1
B	two			0	2

C	three		1		3
D	four		0		4
Q	Each mobile user is authenticated by	M			1
A	SIM		0		1
B	PIN		1		2
C	PUK		0		3
D	IMSI		0		4
Q	International mobile subscriber identity has	M			1
A	Unique dialable number		0		1
B	unique non dialable number		1		2
C	Unique number		0		3
D	single number		0		
Q	IMEI numbers come in 17- and 15- digit sequences	M			1
A	AA-BBBBBB-CCCCCC-D		1		1
B	AA-CCCCCC-CCCCCC-D		0		2
C	AA-DDDDDD-CCCCCC-D		0		3
D	AA-AAAAAA-CCCCCC-D		0		4
Q	Header of datagram in IPv4 has _____	M			1
A	0-20 bytes		0		1
B	20-40 bytes		0		2
C	20-60 bytes		1		3
D	20-80 bytes		0		4
Q	Average received signal power decreases _____ with distance.	M			1
A	Exponentially		0		1
B	logarithmically		1		2
C	two times		0		3
D	four times		0		4
Q	A link budget is accounting of all _____	M			1

A	Gain and losses from the transmitter			1	1
B	Power transmitted by transmitter			0	2
C	Power received by receiver			0	3
D	Power transmitted and received			0	
Q	Log normal shadowing implies --- distribution		M		1
A	Rayleigh			0	1
B	Gamma			0	2
C	Gausian			1	3
D	Nakagami			0	4
Q	Which of the following is not a practical path loss estimation technique?		M		1
A	Log distance path loss model			1	1
B	Log normal shadowing			0	2
C	Determination of percentage of coverage area			0	3
D	Hata model			0	4
Q	What does path loss exponent indicates?		M		1
A	Rate at which path loss decreases with distance			0	1
B	Rate at which path loss increases with distance			1	2
C	Rate at which path loss decreases with power density			0	3
D	Rate at which path loss increases with power density			0	4
Q	Flooding is		M		1
A	Reactive technique			0	1
B	Duplicated message that can be avoided			0	2
C	Duplicated message that are sent			1	3
D	Proactive technique			0	
Q	Number of transmissions is used as		M		1
A	Performance matrix			0	1
B	Routing matrix			1	2
C	Topology discovery			0	3

D	Network allocation			0	4
Q	If a MAC protocol does not allow any collisions		M		1
A	Reservation mechanism			0	1
B	Random access			0	2
C	Contention-based			0	3
D	contention-free			1	4
Q	In IEEE 802.11, a BSS without an AP is called an _____.		M		1
A	an ad hoc architecture			1	1
B	an infrastructure network			0	2
C	an ad hoc architecture & an infrastructure network			0	3
D	SONET			0	4
Q	In Wireless Ad Hoc Networks, Time required for an entering node or group of nodes to become integrated into the ad hoc network is		M		1
A	Network settling time			0	1
B	Network join time			1	2
C	Network depart time			0	3
D	Network recovery time			0	
Q	The term that refers to the time in which the Request to Send (RTS) and Clear to Send (CTS) control frames are in transition is called		M		1
A	Hand shaking period			1	1
B	Back-off time			0	2
C	Frame exchange timeline			0	3
D	timeline			0	4
Q	LEACH protocol is a		M		1
A	Hierarchical protocol			1	1
B	Data centric protocol			0	2

C	Location based protocol			0	3
D	Qos Based protocol			0	4
Q	Which of the following is not true about VANET		M		1
A	They are special case of MANET			0	1
B	In VANET, nodes are power limited			0	2
C	VANET means Vehicular Adaptive networks			1	3
D	In VANET, protocols should be based on reactive routing			0	4
Q	RTS/CTS mechanism in MACA protocol solves the problem of		M		1
A	Medium contention			0	1
B	Congestion			0	2
C	Hidden node			1	3
D	Bandwidth delay product			0	
Q	The hosts which are basically stationary hosts who move from one fixed site to another from time to time but use the network only when they are physically connected to it are called		M		1
A	Migratory hosts			1	1
B	Stationary hosts			0	2
C	Mobile hosts			0	3
D	Random hosts			0	4
Q	Military vehicles on a battlefield with no existing infrastructure will deploy ..... network.		M		1
A	MANET			1	1
B	Cell Network			0	2
C	LAN			0	3
D	Wi-Fi			0	4
Q	The duration of the steady state phase is more than that of the set up phase		M		1

A	To maximize overhead			0	1
B	To minimize overhead			1	2
C	To minimize congestion			0	3
D	To maximize data output			0	4
Q	Each setup phase in LEACH consists of		M		1
A	data transmisson			0	1
B	cluster formation			0	2
C	CH selection			0	3
D	Cluster formation and CH selection			1	
Q	A sensor node is made up of following basic components except		M		1
A	sensing unit			0	1
B	transceiver unit			0	2
C	software unit			1	3
D	power unit			0	4
Q	A wireless sensor node is equipped with sensing and computing devices, radio transceivers and		M		1
A	power supply unit			1	1
B	amplifier			0	2
C	equilizer			0	3
D	repeater			0	4
Q	Wireless sensor network does not have this application		M		1
A	battlefield surveillance			0	1
B	image processing			1	2
C	Air pollution monitoring			0	3
D	Forest fires detection			0	4
Q	In wireless sensor networks, which constraint is of paramount importance		M		1
A	computing power			0	1

B	communications capabilities			0	2
C	memory			0	3
D	energy consumption			1	4
Q	In WSN, the size of the nodes limits the size of the _____		M		1
A	Processor			0	1
B	battery			1	2
C	transmitting antenna			0	3
D	receiving antenna			0	4
Q	In WSN, Sensing unit is usually composed of two sub units: sensor and _____		M		1
A	amplifier			0	1
B	Processor			0	2
C	ADCs			1	3
D	transceiver			0	4
Q	Memory is part of		M		1
A	sensing unit			0	1
B	transceiver unit			0	2
C	processing unit			1	3
D	power unit			0	4
Q	The sink node may communicate with the task manager node via ____		M		1
A	Bridge			0	1
B	Internet or Satellite.			1	2
C	router			0	3
D	switch			0	4
Q	Wireless Sensor Network protocol stack consists of ____ layers		M		1
A		7		0	1

B		5		1	2
C		4		0	3
D		6		0	4
Q	Different types of application software in WSN can be built and used on the application layer depending on the _____.		M		1
A	processing tasks			0	1
B	forwarding tasks			0	2
C	sensing tasks			1	3
D	transmiting tasks			0	4
Q	In wireless sensor network, the routing is the responsibility of _____ layer		M		1
A	physical			0	1
B	transport			0	2
C	network			1	3
D	data link			0	4
Q	_____ is a common technique frequently used for path discovery and information dissemination in wireless sensor networks		M		1
A	Routing			0	1
B	Switching			0	2
C	Bridging			0	3
D	Flooding			1	4
Q	Sensor protocols for information via negotiation (SPIN), is a _____ negotiation-based family of information dissemination protocols for WSNs		M		1
A	info-centric			0	1
B	data-analytic			0	2
C	data-centric			1	3

D	data-driven			0	4
Q	Which protocol is lightweight?		M		1
A	HTTP			0	1
B	CoAP			0	2
C	SPI			0	3
D	MQTT			1	4
Q	The other name given to IoT by security expert, Eugene Kaspersky is		M		1
A	The Internet of Time			0	1
A	The Internet of Totality			0	2
A	The Internet of Threats			1	3
A	The Internet of Teams			0	4