## Sample Questions

## Computer Engineering

Subject Name: Adhoc Wireless Network

Semester: VIII

## Multiple Choice Questions

Choose the c	correct option for following questions. All the Questions carry equal marks
1.	Military vehicles on battlefield with no existing infrastructure will deploy
Option A:	LAN
Option B:	Wi-Fi
Option C:	Cell Network
Option D:	MANET
2.	IEEE 802.11 have three categories of
Option A:	Fields
Option B:	Frames
Option C:	Signals
Option D:	Sequences
3.	Each channel in Bluetooth layer is
Option A:	1 MHz
Option B:	2 MHz
Option C:	3 MHz
Option D:	4 MHz
4.	In IEEE 802,11 frames, To DS and from DS define the value of the two flags in the
Option A:	Sequence field
Option B:	Data field
Option C:	Frame control
Option D:	Duration field
5.	On wireless networks filtering is the security measure.
Option A:	OUI
Option B:	IP
Option C:	NIC
Option D:	MAC
6.	Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?
Option A:	CDMA
Option B:	CSMA/CA
Option C:	ALOHA
Option D:	CSMA/CD
7.	scheme is used by Bluetooth for multiple access among co located devices in different piconets.

Option B:       Frequency hopping FDD scheme         Option C:       DSSS FDD scheme         8.       Wi-Max provides         9.       Option B:         9.	Option A:	Frequency hopping TDD Scheme
Option C:       DSSS TDD scheme         8.       Wi-Max provides         9.       Option B:         1PTV       Option D:         Option D:       No IPTV services         9.	Option B:	Frequency hopping FDD scheme
Option D:         DSSS FDD scheme           8.         Wi-Max provides           Option A:         VolP           Option B:         IPTV           Option D:         No IPTV services           9.	Option C:	DSSS TDD scheme
8.       Wi-Max provides         Option A:       VolP         Option D:       No IPTV services         9.	Option D:	DSSS FDD scheme
8.       Wi-Max provides         Option A:       VoIP         Option B:       IPTV         Option D:       No IPTV services         9.		
Option A:       VoIP         Option B:       IPTV         Option D:       No IPTV services         9.	8.	Wi-Max provides
Option B:       IPTV         Option C:       Both VoIP and IPTV         Option D:       No IPTV services         9.	Option A:	VoIP
Option C:       Both VoIP and IPTV         Option D:       No IPTV services         9.	Option B:	IPTV
Option D:       No IPTV services         9.	Option C:	Both VoIP and IPTV
9.	Option D:	No IPTV services
9.		
Option A:       Subscriber station         Option B:       Base station         Option C:       Gateway         Option D:       Switch Station         10.       What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?         Option A:       Application         Option B:       Host to host         Option D:       Network Access         11.       Which of the following protocols uses both TCP and UDP         Option A:       SMTP         Option B:       Telnet         Option D:       DNS         12.       Which of the following is private IP address?         Option A:       12.0.1         Option B:       168.172.19.39         Option D:       192.168.24.43         13.       Split TCP provides         Option B:       Flow Control         Option B:       Flow Control         Option B:       Flow Control         Option D:       Split TCP provides         Option D:       Split TCP provides         Option D:       Iselay	9.	provides the connectivity to Wi-Max Networks.
Option B:       Base station         Option C:       Gateway         Option D:       Switch Station         10.       What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?         Option A:       Application         Option D:       Host to host         Option D:       Internet         Option D:       Network Access         11.       Which of the following protocols uses both TCP and UDP         Option A:       SMTP         Option D:       DNS         Option D:       DNS         12.       Which of the following is private IP address?         Option A:       12.0.0.1         Option B:       168.172.19.39         Option D:       192.168.24.43         13.       Split TCP provides         13.       Split TCP provides         13.       Split TCP provides         0ption B:       Flow Control         Option C:       Speedy transmission         Option D:       Delay	Option A:	Subscriber station
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11.       Which of the following protocols uses both TCP and ODP         Option A:       SMTP         Option B:       Telnet         Option C:       FTP         Option D:       DNS         12.       Which of the following is private IP address?         Option A:       12.0.0.1         Option B:       168.172.19.39         Option C:       172.15.14.36         Option D:       192.168.24.43         13.       Split TCP provides         Option A:       Congestion control         Option B:       Flow Control         Option C:       Speedy transmission         Option D:       Delay	11	Willing of the full arrive exercise to the TCD on the UDD
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13.       Split TCP provides         Option A:       Congestion control         Option B:       Flow Control         Option C:       Speedy transmission         Option D:       Delay	1	
Option A:       Congestion control         Option B:       Flow Control         Option C:       Speedy transmission         Option D:       Delay	13.	Split TCP provides
Option B:       Flow Control         Option C:       Speedy transmission         Option D:       Delay	Option A:	Congestion control
Option C:     Speedy transmission       Option D:     Delay	Option B:	Flow Control
Option D: Delay	Option C:	Speedy transmission
	Option D:	Delay
14. The use of ACTP in very large adhoc wireless networks does not provide	14.	The use of ACTP in very large adhoc wireless networks does not provide
Option A: Throughput	Option A:	Throughput
Option B: Reliability	Option B:	Reliability
Option C: Scalability	Option C:	Scalability
Option D: Congestion control mechanism	Option D:	Congestion control mechanism
15. Throughput degradation in TCP is due to	15.	Throughput degradation in TCP is due to

Option A:	Misinterpretation of packet loss
Option B:	Frequent path breaks
Option C:	Decrease of path length
Option D:	Misinterpretation of congestion window
16.	Since Ad-hoc network is already have a limited resources and processing power, to keep a
	confidentiality w.r.t. connectivity between two nodes which are in range of each other, it uses
	a simple secure protocol like
Option A:	IEEE 802.15
Option B:	IEEE 802.11 WEP protocol
Option C:	IEEE 802.11a
Option D:	1EEE 802.17
17	
17.	The network-layer security is concerned with securely delivering packets between
	mobile nodes through
Option A:	Single hop forwarding
Option B:	No Forwarding
Option C:	Multinop ad noc forwarding
Option D:	None of the above
10	Willing of the full series is not a local and time and is time reliable wards of the
10.	which of the following is not a hard real-time application which require Qos
Ontion A:	guarantees?
Option R:	A in traffice control systems
Option C:	Air traine control systems
Option C:	Missile control systems
Option D:	Unline video lecture
10	Which of the following is not a resource constraint of the nodes
Option A:	battery charge
Option B:	Processing power
Option C:	Cost
Option D:	Momory
Option D.	Memory
20	Which one of the following is not a function of network layer?
Option A:	Routing
Option R:	Inter-networking
Option C:	Congestion control
Option D:	Error control
option D.	
21	Which of these components is internal to a computer and is required to connect the
21.	computer to a network?
Option A:	Wireless Access Point
Option R:	Network Interface card
Option C:	Switch
Option D	Hub
22	
22.	about the transmission of each other
Option A:	Intersection
Option R:	Collision
Sphon D.	

Option D:         Error           23.         Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?           Option A:         CDMA           Option A:         CDMA           Option D:         CSMA/CA           Option D:         CSMA/CD           24.         For centralized routing the decision is made by some designated node called           Option A:         designated center           Option D:         Network center           Option C:         Network control center           35.         Route discovery process in AODV protocol is           Option D:         Network control center           25.         Route discovery process in AODV protocol is           Option B:         Passive           Option D:         Frequent           26.         What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?           Option A:         Application           Option B:         Host to host           Option A:         all UDP packets are treated independently by transport layer           Option D:         It sends data very quickly           28.         In ad hoe wireless networks the QoS requirements are more influenced by           Option D:         It sends data very quickly	Option C:	Synchronization
<ul> <li>23. Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?</li> <li>Option B: CDMA</li> <li>Option B: CSMA/CA</li> <li>Option C: ALOHA</li> <li>Option C: SMA/CD</li> <li>24. For centralized routing the decision is made by some designated node called</li> <li>Option A: designated center</li> <li>Option D: Control center</li> <li>Option D: Network control center</li> <li>Option B: Active</li> <li>Option B: Active</li> <li>Option B: Active</li> <li>Option B: Passive</li> <li>Option D: Frequent</li> <li>Option D: Frequent</li> <li>Option D: Frequent</li> <li>Option D: Frequent</li> <li>Option A: Active</li> <li>Option D: Frequent</li> <li>Option C: On Demand</li> <li>Option D: Frequent</li> <li>26. What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?</li> <li>Option C: Internet</li> <li>Option A: Application</li> <li>Option C: Internet</li> <li>Option C: Internet</li> <li>Option C: It is received in the same order as sent order</li> <li>Option D: it sends data as a stream of related packets</li> <li>Option C: It is received in the same order as sent order</li> <li>Option A: USer specification</li> <li>Option B: Routing Protocols</li> <li>Option A: User specification</li> <li>Option B: Routing Protocols</li> <li>Option A: User specification</li> <li>Option B: Routing Protocols</li> <li>Option A: Nuclear reactor control systems</li> <li>Option B: Air traffic control systems</li> <li>Option B: Air traffic control systems</li> <li>Option B: IEEE 802.1</li> <li>Option C: IEEE 802.2</li> <li>Option C: IEEE 802.8</li> <li>31. What is the type of network in which the topology change from time to time?</li> </ul>	Option D:	Error
LAN?         Option A:       CDMA         Option B:       CSMA/CA         Option D:       CSMA/CD         24.       For centralized routing the decision is made by some designated node called         Option A:       designated center         Option B:       Control center         Option D:       Network control center         25.       Route discovery process in AODV protocol is         Option A:       Active         Option C:       On Demand         Option C:       On Demand         Option C:       On Demand         Option C:       On Demand         Option A:       Application         Option A:       Application         Option A:       Application         Option C:       Internet         Option C:       Internet         Option A:       all UDP packets are treated independently by transport layer         Option D:       it sends data as a stream of related packets         Option D:       it sends data very quickly         28.       In ad hoc wireless networks the QOS requirements are more influenced by         Option D:       it sends data very quickly         29.       Which of the following is not a hard real-time application which require QOS	23.	Which multiple access technique is used by IEEE 802.11 standard for wireless
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Option B:         CSMA/CA           Option D:         ALOHA           Option D:         CSMA/CD           24.         For centralized routing the decision is made by some designated node called           Option B:         Control center           Option D:         Network center           Option D:         Network centrer           Option A:         Active           Option A:         Active           Option B:         Route discovery process in AODV protocol is           Option C:         On Demand           Option C:         On Demand           Option A:         Active           Option D:         Frequent           26.         What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?           Option A:         Application           Option D:         Network Access           27.         User datagram protocol is called connectionless because           Option A:         all UDP packets are treated independently by transport layer           Option D:         it s sends data as a stream of related packets           Option D:         it sends data as a stream of related packets           Option D:         it sends oft he nodes           Option A:         It appecides in the same order as sent	Option A:	CDMA
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Option C:         Network center           Option D:         Network control center           25.         Route discovery process in AODV protocol is           Option A:         Active           Option B:         Passive           Option D:         Frequent           26.         What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?           Option A:         Application           Option B:         Host to host           Option D:         Internet           Option D:         Network Access           27.         User datagram protocol is called connectionless because           Option A:         all UDP packets are treated independently by transport layer           Option B:         it sends data as a stream of related packets           Option D:         it sends data very quickly           28.         In ad hoe wireless networks the QoS requirements are more influenced by           Option A:         User specification           Option A:         Resource constraints of the nodes           29.         Which of the following is not a hard real-time application which require QoS guarantees?           Option C:         Topology of the network           Option D:         Resource constraints of the nodes           29.         Which o	Option B:	Control center
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Option C:       IEEE 802.11         Option D:       IEEE 802.8         31.       What is the type of network in which the topology change from time to time?         Option A:       Wi-Fi	Option B:	IEEE 802.5
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31.       What is the type of network in which the topology change from time to time?         Option A:       Wi-Fi	Option D:	IEEE 802.8
31. What is the type of network in which the topology change from time to time? Option A: Wi-Fi		
Option A: Wi-Fi	31.	What is the type of network in which the topology change from time to time?
	Option A:	Wi-Fi

Option B:	Cell network
Option C:	LAN
Option D:	MANET
32.	Hidden terminal problem is due to
Option A:	Simultaneous transmission of nodes within the transmission range of each other
Option B:	Simultaneous reception of by nodes within the transmission range of sender
Option C:	Collision of packets at the receiving nodes due to simultaneous transmission of
	nodes which are not in the transmission range of each other but within the
	transmission range of the receiver
Option D:	The sender and receiver are not in the line of sight or in the transmission range of
	each other
33.	Sender initiated protocol is an example for
Option A:	Contention based protocol with scheduling mechanism
Option B:	Contention based protocol
Option C:	Synchronous protocol
Option D:	Asynchronous protocol
24	
34.	DSR typically imposes a higher routing overhead in bytes than AODV, due to
Option A:	the cost of carrying destination routes in every packet.
Option B:	the cost of carrying source routes in every packet.
Option C:	the cost of carrying source routes in every Network.
Option D:	the cost of carrying destination routes in every Network.
35	A highly adaptive efficient loop free and coalable routing protocol based on link
55.	reversal algorithm
Option A:	DSDV
Option B:	TORA
Option C:	AODV
Option D:	ZRP
option D.	
36.	In TCP BUS upon the detection of a path break, an intermediate node called
	the
Option A:	Pivot node (PN)
Option B:	Failure Node(FN)
Option C:	Active Node(AN)
Option D:	Distributing Node(DN)
37.	is sent to TCP-F sender, If the broken links rejoins or intermediate
	node obtains a new path to destination
Option A:	Route reestablishment notification (RRN)
Option B:	Route Failure Notification(RFN)
Option C:	explicit route disconnection notification (ERDN)
Option D:	explicit route successful notification packet (ERSN)
38.	attack does not come under active attack
Option A:	Snooping

Option B:	Jamming
Option C:	black hole attack
Option D:	gray hole attack
39.	When fraud access points are created to access information such as passwords."
	Which type of Wireless network threat would you classify this under?
Option A:	Identity Theft
Option B:	Network Injection
Option C:	Man in the middle attack
Option D:	Malicious Association
40.	IVC stand for
Option A:	Inter Vehicle Communication
Option B:	International Vehicle Circulation
Option C:	Inter Vehicle Circulation
Option D:	International Vehicle Communication

## **Descriptive Questions**

Give the classification of outdoor and indoor mobility models in adhoc wireless networks. Explain Random Waypoint Model in detail.

What are the main issues that need to be addressed while designing MAC protocol for adhoc networks.? Explain Hidden and exposed terminal problem in detail

What are the characteristics of an Ideal Routing Protocols for Adhoc Wireless Network?

How Route maintenance is carried out in AODV protocol? give advantages and disadvantages of AODV

What are common Attacks on Routing Protocols? Explain in details.

Explain components of WAVE (Wireless Access for the Vehicular Environment).

What are the main issues that need to be addressed while designing MAC protocol for adhoc networks.

In which approach the problems of TCP such as throughput degradation with increase in the path length and unfairness among TCP flows can be overcome? Explain with suitable example and mention this approach merits and demerits

What do you mean by Quality of service (QoS) provisioning? Explain with example QoS routing in Adhoc Wireless Networks.

Give the difference between cellular networks and adhoc wireless networks.

Write short note on IEEE802.15.4(ZigBee).

What are the characteristics of an Ideal Routing Protocols for Adhoc Wireless Network? Write short note on: Various security attacks in application layer.

Explain components of WAVE (Wireless Access for the Vehicular Environment).

Explain the characteristics that affect QoS provisioning in Ad-hoc wireless networks.

What are the main issues that need to be addressed while designing MAC protocol for adhoc networks?

Explain Temporary ordered routing algorithm (TORA). Also mention its advantages and disadvantages.

What do you mean by Quality of service (QoS) provisioning? Explain with example QoS routing in Adhoc Wireless Networks.

Give classification of transport layer solutions. And explain Split Approach and End-to-End approach.

List On-demand (Reactive) routing protocols and Explain TORA.

Explain network security attacks.

Why secure routing protocols are needed? Explain security aware Ad-hoc routing protocol (SAR).

Explain Layered architecture for VANETs.

Explain any three design issues of routing protocol for adhoc wireless networks.

Briefly discuss the network security requirements for adhoc networks.

Differentiate between cellular networks and Ad Hoc network

Explain characteristics of VANET.

Explain issues in designing MAC protocol in adhoc wireless protocol.

Explain Power-Aware routing protocol.

Describe the working mechanism of MAC protocol using directional antenna. Explain any one protocol of this category.

Classify the security attacks in adhoc wireless network. and explain network layer attacks in detailed

What do you mean by Quality of service (QoS) provisioning? Explain with example QoS routing in adhoc wireless networks.

Explain the Five phase reservation protocol.

List and explain the various applications of Ad Hoc Networks.

Discuss the operation of Feedback based TCP with suitable example.

Explain in detail the receiver initiated MAC protocol (MARCH). Media Access with Reduced Handshake Protocol (MARCH)

Explain in detailed Layered architecture for VANETs, DSRC /WAVE standard (IEEE 802.11p)