Sample Questions

Computer Engineering

Subject Name: Human Machine Interaction **Semester: VIII**

Multiple Choice Questions

Choose the correct option for following questions. All the Questions carry equal marks	
1.	The controls on a device panel are designed by the designer in such a way that a user is not able to press or push the buttons since they are either too small or too close. This constraint is called as _____.
Option A:	Positional
Option B:	Accessibility
Option C:	Feedback
Option D:	Ergonomics
2.	Human Memory is viewed as consisting of two components:
Option A:	Long Term Memory and Mid Term Memory
Option B:	Short Term Memory and Random Access Memory
Option C:	Long Term Memory and Short Term Memory
Option D:	Long Term Memory and Random Access Memory
3.	Three basic ways to define a color palette for mobile design are _____.
Option A:	Sequential , Adaptive, Inspired
Option B:	Irrational , Adaptive, Inspired
Option C:	Sequential , Descriptive, Inspired
Option D:	Inspired , Adaptive, Influenced
4.	Mobile platforms those are sold to device makers for nonexclusive distribution on devices are called as _____.
Option A:	Open sourced platforms
Option B:	Proprietary platforms
Option C:	Licensed platforms
Option D:	Distributors platforms
5.	Technically games are really just native applications that use the similar platform SDKs to create immersive experiences. But they are different from native applications for the reason:
Option A:	They cannot be easily duplicated with web technologies
Option B:	Porting them to multiple mobile platforms is not easier
Option C:	They can be easily duplicated with web technologies
Option D:	They are not compatible with web technologies.
6.	Economy in visual pleasing composition refers to-
Option A:	Uniformity of elements based on some principle or plan.

Option B:	Stabilization or equilibrium, a midway center of suspension
Option C:	Frugal and judicious use of display elements
Option D:	Axial duplication
7.	The most immediate level of processing level that deals with audio, visual and other aspects of a product before experiencing it is :
Option A:	Behavioral level
Option B:	Reflective level
Option C:	Incremental level
Option D:	Visceral level
8.	As an interface designer, to ensure that emphasized screen elements stand out, which of the following techniques you will avoid?
Option A:	Higher Brightness
Option B:	Underlining
Option C:	Screen Clutter
Option D:	White Space
9.	Which of the following is the correct color association?
Option A:	Yellow — Go, OK, clear, vegetation, safety.
Option B:	Red — Stop, fire, hot, danger
Option C:	Green — Cold, water, calm, sky, neutrality.
Option D:	Blue — Caution, slow, test.
10.	The use of pop-up windows is to _____ .
Option A:	Display additional information when an abbreviated form of the information is the main presentation technique.
Option B:	Collect primary information
Option C:	Cannot display textual labels for graphical controls.
Option D:	Collect the information of hardware system
11.	_____ is excluded in 'Direct manipulation'.
Option A:	The system is portrayed as an extension of the real world.
Option B:	Continuous visibility of objects and actions.
Option C:	Actions are rapid and incremental with visible display of results.
Option D:	Incremental actions are not reversible.
12.	A pie chart allows you to easily see _____.
Option A:	Information about the proportion of parts relative to the whole.
Option B:	The total number of each category.
Option C:	How much data occurs within a range of numbers.
Option D:	The spread of the data.
13.	The message which calls attention to conditions that require a user action before the system can proceed is :
Option A:	Informational message
Option B:	Status message
Option C:	Critical message
Option D:	Warning message

14.	Java, BREW, S60 comes under which layer of mobile ecosystem-
Option A:	Applications
Option B:	Application frameworks
Option C:	Operating Systems
Option D:	Operators
15.	To reduce screen complexity, Choose correct options.
Option A:	Optimize the number of elements on a screen
Option B:	Do not use any color on a screen
Option C:	Use too many colors on a screen
Option D:	Add more alignment points
16.	Good _____ Model provides Affordance, Mapping and Feedback.
Option A:	Physical
Option B:	Logical
Option C:	User
Option D:	Conceptual
17.	Technically games are really just native applications that use the similar platform SDKs to create immersive experiences. But they are different from native applications for the reason:
Option A:	They cannot be easily duplicated with web technologies
Option B:	Porting them to multiple mobile platforms is not easier
Option C:	They can be easily duplicated with web technologies
Option D:	They are not compatible with web technologies.
18.	A window will have a _____, usually rectangular in shape, to define its boundaries and distinguish it from other windows.
Option A:	Title bar
Option B:	Frame or border
Option C:	Toolbar
Option D:	Status bar
19.	SMS applications can be both _____ or _____.
Option A:	free , premium
Option B:	paid , premium
Option C:	paid , worthless
Option D:	free , worthless
20.	When you move the mouse towards the right pointer it will move towards right. This is an example of…….
Option A:	Feedback
Option B:	Constraints
Option C:	Mapping
Option D:	Affordances
21.	Analogical mapping becomes difficult if domains are _____.
Option A:	Semantically different

Option B:	Semantically same
Option C:	Logically different
Option D:	Syntactically different
22.	If a dial of the microwave is not able to fit on the washing machine controller panel, the constraint faced by designer is _____.
Option A:	Aesthetics
Option B:	Physical
Option C:	Ergonomics
Option D:	Environment
23.	Find odd one out regarding fundamental principles of interaction given by Don Norman.
Option A:	Heuristics
Option B:	Signifiers
Option C:	Affordances
Option D:	Mapping
24.	User drags a folder and animation appears on screen showing files moving from one location to another. This is an example of:
Option A:	Error Prevention
Option B:	Visibility of status
Option C:	Simplicity
Option D:	Consistency
25.	People's requirements always take precedence over technical requirement. This defines :
Option A:	Transparency
Option B:	Trade-offs
Option C:	Simplicity
Option D:	Responsiveness
26.	Disadvantage of a Web interface includes____.
Option A:	Revolutionized Computing
Option B:	Faster Interaction access
Option C:	User control and slow download time
Option D:	Incremental Displays
27.	The remarkable principle of Mobile 2.0 is :
Option A:	Recognising that we are not only the consumers.
Option B:	Recognising that we are the Lords of the Mobile market
Option C:	Recognising that we are in a new age of consumerization
Option D:	Recognising that we are not recognised at all
28.	Which will be appropriate statistical graphics used to show relationships among individual data points in a two-dimensional array?
Option A:	Scatterplots
Option B:	Bar graph

Option C:	Pie chart
Option D:	Flowchart
29.	Browsers use colors that succeed on a variety of browsers and platforms, a palette of___ colors.
Option A:	256
Option B:	216
Option C:	128
Option D:	64
30.	Which of the following is the correct color association?
Option A:	Yellow — Go, OK, clear, vegetation, safety.
Option B:	Red — Stop, fire, hot, danger
Option C:	Green — Cold, water, calm, sky, neutrality.
Option D:	Blue — Caution, slow, test.
31.	_____ appear in one plane on the screen and expand or contract to fill up the display surface, as needed.
Option A:	Cascading windows
Option B:	Tiled windows
Option C:	Overlapped windows
Option D:	Primary window
32.	Android is an example of_____.
Option A:	Open sourced platforms
Option B:	Proprietary platforms
Option C:	Licensed platforms
Option D:	Distributors platforms
33.	As an interface designer, to ensure that emphasized screen elements stand out, which of the following techniques you will avoid?
Option A:	Higher Brightness
Option B:	Underlining
Option C:	Screen Clutter
Option D:	White Space
34.	In web interface, navigation can be done through_____.
Option A:	Menus
Option B:	Lists
Option C:	Links
Option D:	Dialogs
35.	Which of the following refers to context SMS, Mobile websites, Mobile web widgets, Mobile web applications, Native applications?
Option A:	Interface types
Option B:	Mobile application medium types
Option C:	Mobile elements
Option D:	Design strategies

36.	A field of research called _____, a technology can manipulate our sense of touch.
Option A:	Haptics
Option B:	Virtual reality
Option C:	Augmented reality
Option D:	Brain computer interfaces
37.	Which interaction style is based on the user's memory retention ability?
Option A:	Command Language
Option B:	Form fill-in
Option C:	Menu Selection
Option D:	Direct Manipulation
38.	The within-text links should always be placed ____.
Option A:	At the end of the page
Option B:	At the beginning or end of paragraphs or sections of text
Option C:	Within the text
Option D:	Above the text
39.	To reduce screen complexity, Choose correct options.
Option A:	Optimize the number of elements on a screen
Option B:	Do not use any color on a screen
Option C:	Use too many colors on a screen
Option D:	Add more alignment points
40.	A special type of overlapping window that has the windows automatically arranged in a regular progression is ____
Option A:	Tiled Window
Option B:	Cascading Windows
Option C:	Primary Window
Option D:	Secondary Window

Descriptive Questions

Explain different phases of the goal directed design process.
What is Mobile 2.0? Explain the principles of Mobile 2.0.
What is statistical graphics? Explain different types of statistical graphics.
Explain different phases of the goal directed design process.
What is Mobile 2.0? Explain the principles of Mobile 2.0.
What is statistical graphics? Explain different types of statistical graphics.
Design a user interface for a ‘Save Girl Child’ awareness campaign. Assume appropriate data required for it.
Design the web user interface of a monthly expense tracker. Assume suitable data and draw interfaces neatly.

State Electricity Distribution Company wants to provide self help portal for its customers. The portal consists of online meter logging facility, Bill Payments, VDS i.e. Voluntary Deposit Scheme for Bill. Complaint and other Facilities. Being a Subject Matter Expert (SME) provide the detailed analysis along with interface that will be used by people in all Districts.
Design a user interface for a 'Save Earth' awareness campaign. Assume appropriate data required for it.
Design the web user interface of a vacation planner. Assume suitable data and draw interfaces neatly.
Design a user interface to spread awareness about 'Clean India….Green India'
Explain techniques of organizing screen elements, ordering of screen data and content.
Explain the seven stages of action and three levels of processing.
List and explain various types of windows with suitable example.
Differentiate between Graphical User Interface and Web User Interface.
Discuss different presentation styles of Windows? State advantages and disadvantages of each style.
Explain different phases of the goal directed design process.
What are general design principles to be considered for User Interface Design? Also give suitable example for the same.
Design a user interface for a 'Save Water' campaign. Assume appropriate data required for it.
Design a user interface of Career Guidance for 12^{th} standard students. It should give information about various fields available, eligibility criteria, future scope, fees etc.
Draw and explain layers of mobile ecosystem.
Explain importance of Text messages with respect to communication with users.
Explain the gulf of execution and gulf of evaluation.
Explain Mobile Ecosystem.
Write short note on Icons.
Explain the guidelines for color selection for web pages.

Sample Questions

Computer Engineering

Subject Name: Distributed Computing **Semester: VIII**

Multiple Choice Questions

Choose the correct option for following questions. All the Questions carry equal marks	
1.	_____ and _____ are used to hide the access and location of the system.
Option A:	access transparency, location transparency.
Option B:	migration transparency, replication transparency
Option C:	network transparency, location transparency
Option D:	failure transparency, network transparency
2.	The two popular remote object invocation models are
Option A:	RPC and RMI
Option B:	CORBA and RMI
Option C:	MOM and RPC
Option D:	MPI and MOM
3.	In distributed systems, a logical clock is associated with _____
Option A:	each instruction
Option B:	each register
Option C:	each process
Option D:	none of the mentioned
4.	Process transfer policy in Load-balancing algorithms is_____
Option A:	Determines how to exchange load information among nodes
Option B:	Determines to which node the transferable process should be sent
Option C:	Determines the total number of times a process can migrate
Option D:	Determines whether to execute a process locally or remotely
5.	Client centric consistency model useful in applications where_____
Option A:	Data is static
Option B:	One client always updates data store
Option C:	Data updation is not required
Option D:	Data storage is not required
6.	In distributed file system, file name does not reveal the file's _____
Option A:	Local name
Option B:	Global name
Option C:	Cache location
Option D:	Physical storage location
7.	The Ricart & Agrawala distributed mutual exclusion algorithm is:

Option A:	More efficient and more fault tolerant than a centralized algorithm.
Option B:	More efficient but less fault tolerant than a centralized algorithm.
Option C:	Less efficient but more fault tolerant than a centralized algorithm.
Option D:	Less efficient and less fault tolerant than a centralized algorithm.
8.	The kernel is _____ of user threads.
Option A:	a part of
Option B:	the creator of
Option C:	unaware of
Option D:	aware of
9.	What is stub?
Option A:	transmits the message to the server where the server side stub receives the message and invokes procedure on the server side
Option B:	Perform encryption and decryption
Option C:	Perform Routing operation
Option D:	Perform Retransmission of message
10.	In a distributed file system, _____ is mapping between logical and physical objects.
Option A:	Client interfacing
Option B:	Naming
Option C:	Migration
Option D:	Heterogeneity
11.	RPC is an example of ----------
Option A:	synchronous communication
Option B:	asynchronous communication
Option C:	persistent communication
Option D:	time independent operation
12.	What is a remote object reference?
Option A:	The variables referenced by the Method Invocation
Option B:	An identifier for the skeleton referred by a client
Option C:	An identifier for the proxy referenced by a client
Option D:	An identifier for a remote object that is valid throughout a distributed system
13.	In a distributed file system, _____ is mapping between logical and physical objects.
Option A:	Client interfacing
Option B:	Naming
Option C:	Migration
Option D:	Heterogeneity
14.	Concurrency transparency is
Option A:	Where users cannot tell where an object is physically located in the system
Option B:	Hide differences in data representation and how an object is accessed
Option C:	Hide that an object may be shared by several independent users

Option D:	Hide that an object is replicated
15.	Client centric consistency model useful in applications where_____
Option A:	Data is static
Option B:	One client always updates data store
Option C:	Data updates not required in the local store
Option D:	Data storage is not required
16.	The ring election algorithm works by
Option A:	Having all nodes in a ring of processors send a message to a coordinator who will elect the leader
Option B:	Sending a token around a set of nodes. Whoever has the token is the coordinator.
Option C:	Sending a message around all available nodes and choosing the first one on the resultant list
Option D:	Building a list of all live nodes and choosing the largest numbered node in the list
17.	What is a stateless file server?
Option A:	It keeps tracks of states of different objects
Option B:	It maintains internally no state information at all
Option C:	It maintains only client information in them
Option D:	It maintains only client access information in them
18.	In which file model, a new version of the file is created each time a change is made to the file contents and the old version is retained unchanged
Option A:	Unstructured files
Option B:	Structured files
Option C:	Immutable files
Option D:	Mutable files
19.	The Ricart Agrawala distributed mutual exclusion algorithm is:
Option A:	More efficient and more fault tolerant than a centralized algorithm.
Option B:	More efficient but less fault tolerant than a centralized algorithm.
Option C:	Less efficient but more fault tolerant than a centralized algorithm.
Option D:	Less efficient and less fault tolerant than a centralized algorithm.
20.	Which of the following is NOT a technique for achieving scalability
Option A:	Centralization
Option B:	Distribution
Option C:	Replication
Option D:	Caching
21.	A layer which lies between an operating system and the applications running on it is called as -
Option A:	Firmware
Option B:	Hardware
Option C:	Software
Option D:	Middleware

22.	Goals of Distributed system does not include-
Option A:	Resource sharing
Option B:	Access to remote resources
Option C:	Sharing memory space
Option D:	Concurrent process execution
23.	which of the following is not the commonly used semantics for ordered delivery of multicast messages-
Option A:	Absolute ordering
Option B:	Persistent ordering
Option C:	Consistent ordering
Option D:	Casual ordering
24.	The type of transparency that enables resources to be moved while in use without being noticed by users and application is-
Option A:	Location Transparency
Option B:	Migration Transparency
Option C:	Relocation Transparency
Option D:	Access Transparency
25.	A paradigm of multiple autonomous computers, having a private memory, communicating through a computer network, is known as-
Option A:	Distributed computing
Option B:	Cloud computing
Option C:	Centralized computing
Option D:	Parallel computing
26.	Following is not the common mode of communication in Distributed system-
Option A:	RPC
Option B:	RMI
Option C:	Message Passing
Option D:	Shared memory
27.	Following is not the physical clock synchronization algorithm-
Option A:	Lamport's Scalar Clock synchronization
Option B:	Christians clock synchronization
Option C:	Berkley clock synchronization
Option D:	Network time protocol
28.	Distributed Mutual Exclusion Algorithm does not use-
Option A:	Coordinator process
Option B:	Token
Option C:	Logical clock for event ordering
Option D:	Request and Reply message
29.	Vector Timestamp Ordering Algorithm is an example of-

Option A:	Centralized Mutual Exclusion
Option B:	Distributed Mutual Exclusion
Option C:	Physical Clock Synchronization
Option D:	Logical Clock Synchronization
30.	What is fault tolerance in distributed Computing?
Option A:	Ability of system to continue functioning in the event of a complete failure.
Option B:	Ability of system to continue functioning in the event of a partial failure.
Option C:	Ability of system to continue functioning when system is properly working.
Option D:	Ability of distributed system to work in all conditions.
31.	In Task Assignment Approach, we have to-
Option A:	Minimize IPC cost
Option B:	Maximize IPC cost
Option C:	Fix IPC cost
Option D:	Keep constant IPC cost
32.	Backward error recovery requires-
Option A:	Grouping
Option B:	Assurance
Option C:	Check pointing
Option D:	Validation
33.	Which of these consistency models does not use synchronization operations?
Option A:	Sequential
Option B:	Weak
Option C:	Release
Option D:	Entry
34.	Which is not possible in distributed file system?
Option A:	File replication
Option B:	Migration
Option C:	Client interface
Option D:	Remote access
35.	X.500 is a-
Option A:	Directory services
Option B:	Naming services
Option C:	Replication services
Option D:	Consistency services
36.	A DFS is executed as a part of-
Option A:	System specific program
Option B:	Operating system
Option C:	File system
Option D:	Application program
37.	Processes on the remote systems are identified by-

Option A:	Host ID
Option B:	Identifier
Option C:	Host name and identifier
Option D:	Process ID
38.	The function of load-balancing algorithm is-
Option A:	It tries to balance the total system load by transparently transferring the workload from heavily loaded nodes to lightly loaded
Option B:	It helps the process to know the time by simply making a call to the operating system.
Option C:	allows a process to access named entity
Option D:	It synchronizes the clocks
39.	A Multi-threaded Server has following threads-
Option A:	Dispatcher Thread
Option B:	Client Thread
Option C:	Worker Thread
Option D:	Client and Server Thread
40.	Maekawa's Mutual Exclusion Algorithm is based on-
Option A:	Coordinator selection
Option B:	Token
Option C:	Voting
Option D:	Tickets

Descriptive Questions

What are the different architecture models of Distributed System? Explain with suitable diagrams.
Write a short note on Raymond's Tree based Mutual exclusion algorithm.
What is RPC? Explain model of RPC.
What are different data centric consistency model?
Write a short note on code migration.
Explain Bully election algorithm with example.
Define fault tolerance. Describe different types of faults.
Explain Hadoop distributed file system.
Explain Bully election algorithm with an example and different scenarios. Use neat diagrams for the same.
Draw and explain the general architecture of a Message-Queuing System
What are the features of Andrew File System? Define File service architecture of AFS?
Briefly describe the architecture and server operations of NFS.
Explain the different issues and steps involved in a good Load Balancing algorithm
Explain the Centralized algorithms for Mutual Exclusion in Distributed Systems.
Describe File caching schemes in brief.
What is the need for Code Migration? Explain the code migration issues in detail.
Define remote procedure call (RPC)? Describe the working of RPC in detail.

What is an open distributed system and what benefits does openness provide?
Explain Cristian's algorithm for physical clock synchronization
Describe the role of stubs in Remote Procedure Calls.
Define fault tolerance. Describe the different types of faults.
What are the different architecture models of Distributed System? Explain one with a suitable diagram.
Write a short note on the advantages of code migration.
Explain Stream oriented communication with example.
Explain Berkeley physical clock algorithm
Explain different load estimation policies used by load balancing approach.
Differentiate between NOS, DOS and Middleware in the design of a distributed systems.
Differentiate between Data Centric and Client centric Consistency models with examples.
What are the steps involved in the execution of Maekawa's Algorithm for Mutual Exclusion
Write short note on - Group Communication.
What is replication in distributed system? Explain the advantages of replication.
Write short note on - Network File System (NFS)
Discuss the Bully algorithm with appropriate example. State its advantages and disadvantages.
What are the different model of distributed system? Explain.
How Monotonic Read consistency model is different from Read your Write consistency Model? Support your answer with suitable example.

Sample Questions

Computer Engineering

Subject Name: High Performance Computing **Semester: VIII**

Multiple Choice Questions

Choose the correct option for following questions. All the Questions carry equal marks	
1.	_____ classified the computers on the basis of organization of the constituent elements in the computer.
Option A:	Flynn
Option B:	Handler
Option C:	Shore
Option D:	Feng
2.	Two stage instruction pipeline has
Option A:	fetch and Execute instruction
Option B:	Fetch and Write Instruction
Option C:	Fetch and Decode
Option D:	Fetch and Memory Excess
3.	In 3-D hypercube network topology the neighbor of node zero are
Option A:	node 1 and node 2 and node 4
Option B:	node 2 and node 3 and node 4
Option C:	node 3 and node 1 and node 4
Option D:	node 1 and node 4 and node 3
4.	The length of the longest path in a task dependency graph is called
Option A:	the critical path length
Option B:	the critical data length
Option C:	the critical bit length
Option D:	the critical byte length
5.	_____suited to problems that are solved using the divide-and-conquer strategy
Option A:	exploratory decomposition
Option B:	Recursive Decomposition
Option C:	speculative decomposition
Option D:	data decomposition
6.	Using fewer than the maximum possible number of processing elements to execute a parallel algorithm is called _____ a parallel system in terms of the number of processing elements.
Option A:	Scaling down
Option B:	Scaling up
Option C:	Cost optimal

Option D:	Non Cost optimal
7.	Which speedup could be achieved according to Amdahl´s law for infinite number of processors if 5% of a program is sequential and the remaining part is ideally parallel?
Option A:	Infinite speedup
Option B:	5
Option C:	50
Option D:	20
8.	Parallelism can be used to increase the (parallel) size of the problem is applicable in _____.
Option A:	Amdahl's Law
Option B:	Gustafson-Barsis's Law
Option C:	Newton's Law
Option D:	Pascal's Law
9.	The Prefix Sum Operation can be implemented using the_____
Option A:	All-to-all broadcast kernel.
Option B:	All-to-one broadcast kernel.
Option C:	One-to-all broadcast Kernel
Option D:	Scatter Kernel
10.	The _____ functions are used to determine the number of processes
Option A:	MPI_Init
Option B:	MPI_Comm_world
Option C:	MPI_Comm_size
Option D:	MPI_Comm_rank
11.	Handler's classification uses the following three pairs of integers to describe a computer: Computer = (p * p', a * a', b * b') So here what is a meaning of P’
Option A:	Number of PCUs that can be pipelined
Option B:	Number of bits that can be pipelined
Option C:	Number of segments can be pipelined
Option D:	Number of bytes that can be pipelined
12.	Control hazards occurs due to_____
Option A:	ADD instruction
Option B:	MUL instruction
Option C:	DIV instruction
Option D:	Branch instruction
13.	Messages in Cut through routing are divided into?
Option A:	Packets
Option B:	Segments
Option C:	Flits
Option D:	smaller units

14.	We anticipate which pages we are going to browse ahead of time and issue requests for them in advance is known as _____.
Option A:	Prefetching
Option B:	Multithreading
Option C:	Multitasking
Option D:	Latency
15.	The number and size of tasks into which a problem is decomposed determines the _____ of the decomposition.
Option A:	Concurrency
Option B:	Task dependency
Option C:	Granularity
Option D:	Efficiency
16.	_____ is due to load imbalance, synchronization, or serial components as parts of overheads in parallel programs.
Option A:	Inter process interaction
Option B:	Synchronization
Option C:	Idling
Option D:	Excess computation
17.	Which speedup could be achieved according to Amdahl´s law for infinite number of processors if 5% of a program is sequential and the remaining part is ideally parallel?
Option A:	Infinite speedup
Option B:	5
Option C:	50
Option D:	20
18.	Parallelism can be used to increase the (parallel) size of the problem is applicable in _____.
Option A:	Amdahl's Law
Option B:	Gustafson-Barsis's Law
Option C:	Newton's Law
Option D:	Pascal's Law
19.	Synchronization is one of the common issues in parallel programming. The issues related to synchronization include the followings, EXCEPT:
Option A:	Deadlock
Option B:	Livelock
Option C:	Fairness
Option D:	Correctness
20.	Which MPI function is used to determine the label of calling process?
Option A:	MPI_Init
Option B:	MPI_Comm_world
Option C:	MPI_Comm_size
Option D:	MPI_Comm_rank

21.	Due to architectural arrangement of a single instruction stream with multiple data streams , array processors machines are called _____ array processor.
Option A:	MISD
Option B:	SIMD
Option C:	SISD
Option D:	MIMD
22.	SIMD computers require less memory because only _____ needs to be stored.
Option A:	one copy of the program
Option B:	one instruction of the program
Option C:	two instruction of the program
Option D:	few instruction of the program
23.	A processor without structural Hazards is _____.
Option A:	Faster
Option B:	Stock
Option C:	Deadlock
Option D:	Structural hazard
24.	Control hazards occurs due to_____
Option A:	ADD instruction
Option B:	MUL instruction
Option C:	DIV instruction
Option D:	Branch instruction
25.	Pipeline increases the CPU instruction_____.
Option A:	Size
Option B:	Through put
Option C:	Cycle rate
Option D:	Time
26.	If during a cycle, no functional units are utilized, this is referred to as _____ waste
Option A:	Horizontal waste
Option B:	Vertical waste
Option C:	Data waste
Option D:	Explicitly waste
27.	If the second instruction cannot be issued because it has a data dependency with the first, only one instruction is issued in the cycle. This is called _____issue.
Option A:	In-order
Option B:	Out-order
Option C:	Execution
Option D:	Data
28.	Since it uses the out of order mode of execution, the results are stored in _____
Option A:	Buffers

Option B:	Special memory locations
Option C:	Temporary registers
Option D:	TLB
29.	If an exception is raised and the succeeding instructions are executed completely, then the processor is said to have _____
Option A:	Exception handling
Option B:	Imprecise exceptions
Option C:	Error correction
Option D:	Exception
30.	The pattern of_____ among tasks is captured by what is known as a task-interaction graph
Option A:	Interaction
Option B:	Communication
Option C:	Optimization
Option D:	Flow
31.	_____ mapping techniques distribute the work among processes during the execution of the algorithm.
Option A:	Static
Option B:	Sequential
Option C:	Uniform
Option D:	Dynamic
32.	_____ is a method for inducing concurrency in problems that can be solved using the divide-and-conquer strategy.
Option A:	exploratory decomposition
Option B:	speculative decomposition
Option C:	data-decomposition
Option D:	Recursive decomposition
33.	A decomposition into a large number of small tasks is called _____.
Option A:	coarse-grained
Option B:	coarse-ungrained
Option C:	fine-grained
Option D:	fine-ungrained
34.	The number of processors used to execute a program is defined as the _____ of parallelism.
Option A:	Degree
Option B:	Level
Option C:	Amount
Option D:	Rank
35.	Speed up is defined as a ratio of
Option A:	S=Ts/Tp

Option B:	S= Tp/Ts
Option C:	Ts=S/Tp
Option D:	Tp=S /Ts
36.	Total cost of a parallel algorithm is the product of
Option A:	Total Cost = Time complexity × Number of processors used
Option B:	Total Cost = Time complexity × Number of cycle used
Option C:	Total Cost = Time complexity × Number of task used
Option D:	Total Cost = Time complexity × Number of instructions used
37.	Most commonly used topologies in message-passing programs are one-, two-, or higher-dimensional grids, that are also referred to as _____
Option A:	Higher Dimensional topology
Option B:	Cartesian topologies
Option C:	Cart topologies
Option D:	Ring topologies
38.	If the parallel program is highly synchronous (i.e., sends and receives are posted around the same time), _____.
Option A:	buffered Receive may perform better than buffered sends
Option B:	buffered Receive may perform better than non buffered sends
Option C:	buffered sends may perform better than non buffered sends
Option D:	non-buffered sends may perform better than buffered sends
39.	The one-to-all broadcast operation is performed in MPI using the _____
Option A:	MPI_Bcast function
Option B:	MPI_Broadcast function
Option C:	MPI_BroadCast function
Option D:	MPI_BCast function
40.	Non-blocking Message Passing Operations are generally accompanied by a_____ operation.
Option A:	Send Buffer
Option B:	Buffer
Option C:	check-status
Option D:	Receive Buffer

Descriptive Questions

Explain Decomposition techniques.
Write MPI program for Cannon's Matrix-Matrix Multiplication.
Explain different performance metrics for Parallel System.
Explain Non-Blocking Communication using MPI.
Explain sources of overhead in parallel programs
Describe pipeline performance (Efficiency , Speedup and Throughput) w.r.t length of the pipe (n) and task run on pipe(m) for condition m>>n, n>>m and m=n.
Write a MPI program to find sum of N numbers.
Explain speedup, efficiency and scalability with suitable example.

Short note on 'SIMD matrix multiplication'.
State and explain Amdahl’s law. What is the relevance of Amdahl’s law in HPC?
Discuss different levels of parallel processing?
With neat block diagram explain in detail about the various programmatic levels of parallel processing.
Explain the different mapping techniques that are used load balancing.
Discuss in detail Pipeline hazards with its types.
Explain Very long instruction word (VLIW) in detail.
Write a parallel MPI program to broadcast a data from root process to 4 other processes.
State and Explain the performance metric speed up , Efficiency , Throughput and Scalability
Explain in brief classification of parallel system based on memory access.
Discuss the categories of computers based on Handler’s classification.
Explain write-Invalidate Protocol with the help of diagram.
Explain Granularity, Concurrency and dependency graph.
Write MPI program for broadcast of data.
Explain the pros and Cons of Open MP.
Explain the Concept of Scatter and Gather.
Explain Quantum Computers.
Write a short note on Memory organization
Give the advantages in using non-uniform memory access model.
Explain the pros and Cons of Open MP.
Distinguish between loosely coupled and tightly coupled multiprocessors.
Discuss the categories of computers based on Flynn's classification.

Sample Questions

Computer Engineering

Subject Name: Natural Language Processing **Semester: VIII**

Multiple Choice Questions

Choose the correct option for following questions. All the Questions carry equal marks	
1.	"He went to the bank". identify the challenge of NLP
Option A:	Discourse resolution
Option B:	Noun resolution
Option C:	Verb resolution
Option D:	Pronoun resolution
2.	" Bat is flying in the sky" Identify the dependency checking to perform sense disambiguation of 'Bat'
Option A:	Bat -> sky, fly
Option B:	Bat-> sky
Option C:	Sky-> fly
Option D:	Bat-> fly
3.	N-grams are defined as the combination of N keywords together. How many bigram can be generated from given sentence: "Data segmentation is a great source to learn text summarization"
Option A:	7
Option B:	8
Option C:	9
Option D:	10
4.	"Given a input sentence "" The crane is loaded"" How will you determine the correct sense of the word 'crane'"
Option A:	Word will be searched in lexicon and first sense of crane will be identified
Option B:	Identify the POS of crane and load, apply rule and determine correct meaning
Option C:	Determine the clue word load and find the dependency between crane and load. Match with all the definitions of crane in the lexicon. Best match is the answer.
Option D:	As clue words such as fly, sky are not part of input, so correct sense of crane is machinery sense
5.	HMM model formula P(q2|x2,q1)=p(x2|q2)*P(q2|q1) This formula does not contain
Option A:	State transition Probability
Option B:	Emission probability
Option C:	CDF
Option D:	Initial state
6.	In Porter stemmer algorithm,*v* indicates
Option A:	Stem contains a vowel
Option B:	Stem contains any character
Option C:	Stem contains VC combinations
Option D:	Stem contains CV combinations
7.	Who invented Wordnet
Option A:	Tomas Mikolov
Option B:	Atlas University

Option C:	PENN treebank
Option D:	Princeton University
8.	"The Tajmahal is one of the seventh wonder of the world". Identify the application of NLP in the word 'TajMahal'
Option A:	Named entity recognition
Option B:	QA system
Option C:	Text categorization
Option D:	Sentiment analysis
9.	The contraction of the morpheme “is”, as in, “That’s the way to do it.” is an example of:
Option A:	Clitic
Option B:	Inflection
Option C:	Derivation
Option D:	Suffix
10.	Lesk algorithm
Option A:	converts words to vectors
Option B:	finds comparison between two words
Option C:	measures overlap between sense definitions for all words in context
Option D:	check for similarity between words in context
11.	What is morphology?
Option A:	The study of linguistic sounds
Option B:	It is a study of the way words are built up from smaller meaning-bearing units called morphemes.
Option C:	The study of the structural relationships between words.
Option D:	The study of linguistic units larger than a single utterance.
12.	Select correct example of inflectional morpheme?
Option A:	Read --> Reader
Option B:	Teach --> Teacher
Option C:	Tall --> Taller
Option D:	Play --> Player
13.	Parts of speech can be divided into two broad super categories _____
Option A:	Parent class and derived class
Option B:	Closed class and open class
Option C:	Sentence class and character class
Option D:	Sub class and child class
14.	Bigram model also called as _____
Option A:	First-order Morkov model
Option B:	Second-order Morkov model
Option C:	Third-order Morkov model
Option D:	(N-1)th-order Morkov model
15.	"Custemer Review system" is example of one of the following?
Option A:	Machine Translation
Option B:	Sentiment Analysis
Option C:	Question-Answering system
Option D:	Text-Summerization
16.	"I saw someone on the hill with a telescope." is the example of which type of ambiguity?

Option A:	Lexical Ambiguity
Option B:	Semantic Ambiguity
Option C:	Syntactic Ambiguity
Option D:	Pragmatic Ambiguity
17.	Sentiment analysis is also called as ____
Option A:	Summarization
Option B:	Question-Answering
Option C:	Opinion Mining
Option D:	Named-Entity Recognition.
18.	What is the task of Robust Word Sense Disambiguation (WSD) for word in given sentence?
Option A:	Define a concept or word meaning
Option B:	Measure overlap between sense definitions for all words in context
Option C:	Define word without senses
Option D:	selecting the correct sense for a word in a given sentence
19.	"Please maintain silence" is the example of _____
Option A:	Wh-subject Question
Option B:	Yes-No Question
Option C:	Imperative sentence
Option D:	Declarative sentence
20.	Select correct constraint on coreference for given example “John and Mary have Hyundai cars. They love them".
Option A:	Number agreement
Option B:	Gender agreement
Option C:	Person and Case agreement
Option D:	Syntactic constraint.
21.	Natural language processing is a sub-domain of,
Option A:	Networking
Option B:	Artificial Intelligence
Option C:	Algorithms
Option D:	Databases
22.	Which of this is not an application of NLP?
Option A:	Speech Understanding
Option B:	Chatbot
Option C:	Scanned Image Classification
Option D:	News Clustering
23.	This kind of ambiguity occurs when a sentence is parsed in different ways.
Option A:	Lexical Ambiguity
Option B:	Syntactic Ambiguity
Option C:	Semantic Ambiguity
Option D:	Pragmatic Ambiguity
24.	“Appoint→Appointee” is an example of ---------- morphology.
Option A:	Derivational
Option B:	Inflectional
Option C:	Compounding
Option D:	Cliticization

25.	The stemming algorithm is used to,
Option A:	Form complex words from base form
Option B:	Generats the parse tree of a sentence
Option C:	Check meaning of a word in dictionary
Option D:	Reduce inflected form of a word to a single base form
26.	P(dog | the big) is an example of ------ model
Option A:	Unigram
Option B:	Bigram
Option C:	Trigram
Option D:	Quadrigram
27.	Which of this is not true about Morphology?
Option A:	Provides systematic rules for forming new words in a language
Option B:	Provide rules for forming sentences in a language
Option C:	Can be used to verify if a word is legitimate in a language
Option D:	Group words into classes
28.	CFG captures ----------
Option A:	Constituency and ordering
Option B:	word meaning
Option C:	relation between words
Option D:	sentence meaning
29.	Which of the following is a Rule based POS tagger?
Option A:	HMM Tagger
Option B:	Ngram Tagger
Option C:	ENGTWOL Tagger
Option D:	Brill Tagger
30.	Syntax analysis concerns with:
Option A:	the way words are built up from smaller meaning bearing units
Option B:	what words mean and how these meanings combine in sentences to form sentence meanings
Option C:	how the immediately preceding sentences affect the interpretation of the next sentence
Option D:	how words are put together to form correct sentences and what structural role each word has
31.	Which of the following is not a sequence labeling technique?
Option A:	Maximum Entropy
Option B:	Context Free Grammar
Option C:	Conditional Random Fields
Option D:	Hidden Markov Model
32.	Which of the following is an example of “hyponym-hypernym” semantic relationship?
Option A:	Car-Vehicle
Option B:	Car-Wheel
Option C:	Wheel-Car
Option D:	Car-Ford
33.	The root form of a word in Wordnet dictionary is called
Option A:	Stem
Option B:	Sense
Option C:	Gloss

Option D:	Lemma
34.	Roughly, Semantic analysis is----------
Option A:	Language Understanding
Option B:	Language Generation
Option C:	Language Preprocessing
Option D:	Language Translation
35.	“All boys love cricket ”. How is this sentence represented in First Order Logic form?
Option A:	∃x boys(x)→love(x,cricket)
Option B:	∀x boys(x)→love(x,cricket)
Option C:	∃x,y love(x) ∧ cricket(y)
Option D:	∀x boys(x) ∧ love(x,cricket)
36.	Pragmatic refers to
Option A:	Literal meaning
Option B:	Intended meaning
Option C:	Structural meaning
Option D:	Wordnet dictionary meaning
37.	“John bought an Acura Integra today, but the engine seemed noisy.” Which of the following is an Inferrable referent?
Option A:	John
Option B:	Acura
Option C:	Engine
Option D:	Noisy
38.	Shivaji→ शिवाजी Is an example of:
Option A:	Translation
Option B:	Transfer
Option C:	Transliteration
Option D:	Generation
39.	In which of the summarization technique, summary contains the sentences from the given document only?
Option A:	Extractive Summarization
Option B:	Abstractive summarization
Option C:	Mixed Summarization
Option D:	Copied summarization
40.	Which of this is not a reference resolution algorithm?
Option A:	Hobb’s Algorithm
Option B:	Lappin and Leass’s Algorithm
Option C:	Centering Algorithm
Option D:	Lesk’s Algorithm

Descriptive Questions

Explain how word sense disambiguation will be useful for resolving ambiguity
Explain the text preprocessing steps of Natural language processing with an example
Explain machine translation and its types
What is language model? Explain N gram model
What is parsing? Explain Top-down and Bottom-up approach of parsing with suitable example.
Discuss various approaches to perform Part-Of-Speech (POS) tagging
Explain derivational and inflectional morphology in detail with suitable example
Explain following Relations among lexemes & their senses, Homonymy, Synonymy, Hyponymy with example
What are the five types of referring expression? Explain with example
What are the stages of NLP? Explain with example.
What are basic regular expression patterns? Give brief answer for each with example.
What are the attachments for fragment of English? Explain with example.
Differentiate between Derivational and Inflectional morphemes.
Define POS tagging. Explain rule-based POS tagging with example.
What are the reference phenomenons? Explain types of referring expression.
Differentiate between closed classes and open classes with example.
Show derivation of "The boy likes a girl" in parse tree, consider following grammar rule: S→NP VP VP →Verb NP NP→ Det NOM NOM → Noun Noun→ boy | girl Verb → sees | likes Adj → big | small Adv → very Det → a | the
What is information retrieval and machine translation in applications? Give brief answer on both.
Discuss various challenges in processing natural language.
What is the role of FSA in Morphological analysis?
What is WordNet? How is "sense" defined in WordNet? Explain with example.
What do you mean by stemming? Explain Porter's stemming algorithm in detail.
How HMM is used for POS tagging? Explain in detail.
Explain use of CFG in Natural Language Processing with suitable example.
Consider a suitable training data and show the Bigram probability calculation for the same.
Compare Information Retrieval with Information Extraction system.
What is Word Sense Disambiguation? Illustrate with example how Dictionary-based approach identifies correct sense of an ambiguous word.
Discuss in detail any application considering any Indian regional language of your choice.

Sample Questions

Computer Engineering

Subject Name: Adhoc Wireless Network **Semester: VIII**

Multiple Choice Questions

Choose the 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 A:	Frequency hopping TDD Scheme
Option B:	Frequency hopping FDD scheme
Option C:	DSSS TDD scheme
Option D:	DSSS FDD scheme
8.	Wi-Max provides ----------
Option A:	VoIP
Option B:	IPTV
Option C:	Both VoIP and IPTV
Option D:	No IPTV services
9.	---------- provides the connectivity to Wi-Max Networks.
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 C:	Internet
Option D:	Network Access
11.	Which of the following protocols uses both TCP and UDP
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
14.	The use of ACTP in very large adhoc wireless networks does not provide
Option A:	Throughput
Option B:	Reliability
Option C:	Scalability
Option D:	Congestion control mechanism
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:	IEEE 802.17
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:	Multihop ad hoc forwarding
Option D:	None of the above
18.	Which of the following is not a hard real-time application which require QoS guarantees?
Option A:	Nuclear reactor control systems
Option B:	Air traffic control systems
Option C:	Missile control systems
Option D:	Online video lecture
19.	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:	Memory
20.	Which one of the following is not a function of network layer?
Option A:	Routing
Option B:	Inter-networking
Option C:	Congestion control
Option D:	Error control
21.	Which of these components is internal to a computer and is required to connect the computer to a network?
Option A:	Wireless Access Point
Option B:	Network Interface card
Option C:	Switch
Option D:	Hub
22.	-------- occurs when both nodes transmit packets at the same time without knowing about the transmission of each other.
Option A:	Intersection
Option B:	Collision

Option C:	Synchronization
Option D:	Error
23.	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
24.	For centralized routing the decision is made by some designated node called ……
Option A:	designated center
Option B:	Control center
Option C:	Network center
Option D:	Network control center
25.	Route discovery process in AODV protocol is _____
Option A:	Active
Option B:	Passive
Option C:	On Demand
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 C:	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 C:	it is received in the same order as sent order
Option D:	it sends data very quickly
28.	In ad hoc wireless networks the QoS requirements are more influenced by
Option A:	User specification
Option B:	Routing Protocols
Option C:	Topology of the network
Option D:	Resource constraints of the nodes
29.	Which of the following is not a hard real-time application which require QoS guarantees?
Option A:	Nuclear reactor control systems
Option B:	Air traffic control systems
Option C:	Missile control systems
Option D:	Online video lecture
30.	_____specifies the Logical Link Control (LLC) in VANET.
Option A:	IEEE 802.2
Option B:	IEEE 802.5
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:	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
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 scalable routing protocol based on link reversal algorithm.
Option A:	DSDV
Option B:	TORA
Option C:	AODV
Option D:	ZRP
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)