MODULE 1

Q	A Parallel computer is the computer system capable of
A	Parallel Computing
A	Centralized Computing
A	Decentralized Computing
A	Distributed Computing
Q	A distributed computer running a distributed program is known as
A	Distributed Process
A	Distributed Application
A	Distributed Computing
A	Distributed Program
Q	Uni processor computing is known as
A	Centralized Computing
A	Parallel Computing
A	Distributed Computing
A	Grid Computing
Q	Which of the following is true about heterogeneous architecture?
A	There is no mixed architecture style at one abstraction level
A	Heterogeneous architecture implies increased time efficiency
A	If the general structure of a system is connected using one architecture style, and each component can use a different one, this is one example of heterogeneous architecture
A	Heterogeneous architecture implies decreased time efficiency
Q	The transparency that enables multiple instances of resources to be used, is called
A	Replication transparency
A	Scaling transparency
A	Concurrency transparency
A	Performance transparency
Q	A paradigm of multiple autonomous computers, having a private memory, communicating through a computer network, is known as
A	Distributed computing
A	Cloud computing
A	Centralized computing
A	Parallel computing
Q	Multithreading is also called as _____
A	Concurrency
A	Simultaneity
A	Crosscurrent
A	Recurrent
Q	The technique that increases the system's productivity.

A		multiprogramming
A		multitasking
A		multiprocessing
A		single-programming
Q		Multithreading is also called as _____
A		Concurrency
A		Simultaneity
A		Crosscurrent
A		Recurrent
Q		A technique that allows more than one program to be ready for execution and provides the ability to switch from one process to another.
A		multitasking
A		multiprocessing
A		multitasking
A		multiprogramming
Q		Multiprogramming is mainly accomplished by:
A		os
A		software
A		hardware
A		program
Q		In a multi-processor configuration two coprocessors are connected to host 8086 processor. The instruction sets of the two coprocessors
A		must be same
A		may overlap
A		must be disjoint
A		must be the same as that of host
Q		Multiprogramming systems:
A		Are easier to develop than single programming systems
A		Execute each job faster
A		Execute more jobs in the same time period
A		Are used only one large mainframe computers
Q		A multiprocessor operating system must take care of
A		authorized data access and data protection
A		unauthorized data access and data protection
A		authorized data access
A		data protection
Q		With .... only one process can execute at a time; meanwhile all other process are waiting for the processer. With .... more than one process can be running simultaneously each on a different processer.
A		Multiprocessing, Multiprogramming
A		Multiprogramming, Uniprocessing
A		CMultiprogramming, Multiprocessing
A		Uniprogramming, Multiprocessing

Q	Asymmetric multiprocessing systems of the computer system use
A	master relationship
A	slave relationship
A	master slave relationship
A	serial processing
Q	What of the following system is not multi-processor system?
A	A system with multiple CPU, each CPU contains a single core.
A	A system with a single CPU that has two core.
A	A system with multiple CPU, each CPU contains two cores.
A	A system with a single CPU that has a single core.
Q	Which of the following is not an advantage of multiprocessor systems
A	Increased throughput
A	Economy of scale
A	Increased reliability
A	Optimise the program size

MODULE 2

Q	What is the other name for object middleware?
A	Object request interface
A	Object Request broker
A	Object enabled broker
A	Object enabled interface
Q	A "glue" between client and server parts of application.
A	Middleware
A	Firmware
A	Package
A	System Software
Q	A type of middleware that allows for between the built-in applications and the real-time OS?
A	Firmware
A	Embedded Middleware
A	Database middleware
A	Portals
Q	Middleware forms a layer between
A	application and distributed platforms
A	several individual computers
A	application and client
A	server and client
Q	Middleware systems follow
A	middleware solution
A	specific model
A	specific architecture style
A	specific protocol

Q	A typical _____ program creates some remote objects, makes references to these objects accessible, and waits for clients to invoke methods on these objects.
A	Server
A	Client
A	Thread
A	Concurrent
Q	From the following which is not a type of Communication
A	Persistent and transient communication
A	Synchronous and asynchronous communication
A	Persistent synchronous and persistent asynchronous communication
A	Non persistent communication
Q	What is true about asynchronous communication
A	in asynchronous communication most of the time there is no reply from the reciever end
A	Sender and reciver process need to be active at the time of communication
A	it uses procedure calling at the server's side
A	in asynchronous communication there is always a reply from the reciever end
Q	An email service is a typical example of messaging service, where a sender sends an email message to recipient.
A	It never waits for a reply from the recipient
A	it always waits for a reply from the reciepient before sending next
A	it will always send the reply email message to the sender.
A	it is a type of synchronous communication
Q	Which of the following is not a classification of group communication?
A	One to Many
A	Many to one
A	Many to Many
A	Many to All
Q	Which of the following is not commonly used semantics for ordered delivery of multicast messages are:
A	Absolute Ordering
A	Consistent Ordering
A	Casual
A	Non- Casual
Q	The data sequence of information that is time-dependent is called _____
A	Stream of data
A	traditional data
A	transactional data
A	spatial data
Q	Which of the following is not an example of stream data
A	Video
A	Audio

A	large data files
A	text
Q	MPI and sockets are examples of
A	Message oriented transient communication
A	message oriented persistent communication
A	Mobile Oriented Communication
A	Object oriented permanent Communication
Q	The sever and client computer interact with each other using _____
A	Specific Port Number and IP Address
A	MAC Address
A	MAC Address and Port Number
A	MAC Address and IP Address
Q	In consistent ordering when recieving the message each member calculate its proposed sequence number by using the function_____
A	max(Fmax, Pmax) + I + i/N
A	min(Fmax, Pmax) + I + i/N
A	min(Fmin, Pmax) + I + i/N
A	max(Fmin, Pmin) + I + i/N
Q	A socket uses _____ to transmit data between the sender and the reciever.
A	IPC
A	IMC
A	IBC
A	API
Q	The Resource Reservation Protocol is _____ layer protocol designed to reserver resources in Distributed Computing.
A	Transport Layer
A	Network Layer
A	Interface Layer
A	Internet Layer

MODULE 3

Q	Which of the following disadvantages follows the single coordinator approach?
A	Bottleneck
A	Slow response
A	Deadlock
A	One request per second
Q	Which are the two complementary deadlock-prevention schemes using timestamps?
A	The wait-die & wound-wait scheme
A	The wait-n-watch scheme
A	The wound-wait scheme

A	The wait-wound & wound-wait scheme
Q	A process can enter into its critical section _____
A	anytime
A	when it receives a reply message from its parent process
A	when it receives a reply message from all other processes in the system
A	when it receives a reply message from its child process
Q	If a process is executing in its critical section _____
A	any other process can also execute in its critical section
A	no other process can execute in its critical section
A	one more process can execute in its critical section
A	every process can execute in its critical section
Q	In distributed systems, a logical clock is associated with _____
A	each instruction
A	each process
A	each register
A	Many registers
Q	When resources have multiple instances _____ is used for deadlock Avoidance.
A	Bankers algorithm
A	Resource Allocation Graph
A	Semaphores
A	Phishing
Q	Synchronization tool is?
A	thread
A	pipe
A	semaphore
A	socket
Q	In which the access takes place when different processes try to access the same data concurrently and the outcome of the execution depends on the specific order, is called
A	dynamic condition
A	race condition
A	essential condition
A	critical condition
Q	Process synchronization can be done on which of the following levels
A	hardware
A	software
A	both hardware and software
A	BIOS
Q	Which of the following process can be affected by other processes during execution in the system?
A	init process
A	child process

A	parent process
A	cooperating process
Q	How can we avoid deadlock
A	Resource Allocation must be done at once
A	there must be a fixed number of resources to allocate
A	all deadlock process must be aborted
A	inversion technique can be used
Q	A minimum of _____ variable(s) is/are required to be shared between processes to solve the critical section problem.
A	1
A	2
A	3
A	4
Q	Which of the following conditions is not requied to solve the critical section problem?
A	Mutual Exclusion
A	Progress
A	Bounded Waiting
A	Sharing
Q	The segment of code in which the process may change common variables, update tables, write into files is known as _____
A	program
A	critical section
A	non – critical section
A	synchronizing
Q	A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in which access takes place is called _____
A	Data consistency
A	race condition
A	aging
A	starvation

MODULE 4

Q	The address of the next instruction to be executed by the current process is provided by the _____
A	Program counter
A	CPU registers
A	Process stack
A	Pipe
Q	Which system call returns the process identifier of a terminated child?
A	wait

A	exit
A	fork
A	get
Q	A thread shares its resources(like data section, code section, open files, signals) with _____
A	other process similar to the one that the thread belongs to
A	other threads that belong to similar processes
A	other threads that belong to the same process
A	different threads that belong to the different process
Q	_____ is often used for implementing specialized threads within a process.
A	Team model
A	Dispatcher worker model
A	Pipeline model
A	Light model
Q	The capability of a system to adapt the increased service load is called _____
A	scalability
A	tolerance
A	capacity
A	polling
Q	Logical extension of computation migration is
A	process migration
A	system migration
A	thread migration
A	data migration
Q	No special machines manage the network of architecture in which resources are known as
A	Peer-to-Peer
A	Space based
A	Tightly coupled
A	Loosely coupled
Q	Scheduuling of threads done by
A	input
A	output
A	operating system
A	memory
Q	For execution on process need
A	Throughput
A	Timer
A	Resources
A	Access Time
Q	Message passing system allows processes to _____

A	communicate with one another without resorting to shared data
A	communicate with one another by resorting to shared data
A	share data
A	name the recipient or sender of the message
Q	Which is not an examples of state information ?
A	Mounting information
A	Description of HDD space
A	Session keys
A	Lock status
Q	Which policy used in load balancing algorithm
A	standard policy
A	variant policy
A	location policy
A	random policy
Q	Select the correct sequence for process migration
A	freezing the process- Transfer the process- forward the message- communicate between cooperating process
A	Transfer the process- forward the message- communicate between cooperating process-freezing the process
A	forward the message- communicate between cooperating process-freezing the process- Transfer the process
A	communicate between cooperating process-freezing the process- Transfer the process- forward the message
Q	_____ can be defined as a lightweight process, a part of process which is to be executed sequentially on one core
A	method
A	Thread
A	virtualization
A	client server
Q	_____ is defined as that feeling something when it is not actually present
A	method
A	Thread
A	virtualization
A	client server
Q	What is common problem found in distributed system ?
A	Process Synchronization
A	Communication synchronization
A	Deadlock problem
A	Power failure

Q What are the advantages of token(with rings) passing approach ? I. One processor as coordinator which handles all requests II. No starvation if the ring is unidirectional III. There are many messages passed per section entered if few users want to get in section IV. One processor as coordinator which handles all requests V. Only one message/entry if everyone wants to get in

A I, II and V

A I, II and IV

A II, III and IV

A II, IV and V

Q Which are the two complementary deadlock-prevention schemes using time stamps ?

A The wait-die & wound-wait scheme

A The wait-n-watch scheme

A The wound-wait scheme

A The wait-wound & wound-wait scheme

Q In wound-wait If a young process wants a resource held by an old process, the young process will _____

A Killed

A Wait

A Preempt

A Restarts and wait

Q Election message is always sent to the process with _____

A Lower numbers

A Waiting processes

A Higher numbers

A Requesting Lower number of resources

Q Which algorithms are used for selecting a process to act as coordinator or sequencer? I. Centralized algorithm II. Election algorithm III. Ring algorithm IV. Chandy-Misra-Haas algorithm

A II and IV

A II, III, IV

A II and III

A II

Q What is interprocess communication?

A communication within the process

A communication between two process

A communication between two threads of same process

A Comunication of process

Q _____ enables the migration of the virtual image from one physical machine to another.

A Visualization

A Virtualization

A Migration

A	Virtual transfer
Q	If one thread opens a file with read privileges then _____
A	other threads in the another process can also read from that file
A	other threads in the same process can also read from that file
A	any other thread can not read from that file
A	all of the mentioned

MODULE 5

Q	A replica set can have only _____ primary.
A	One
A	two
A	three
A	zero
Q	Two types of subscriptions present for replication is _____
A	push and pull
A	throw and pull
A	push and throw
A	Pull and throw
Q	_____ class contains an implementation of a proxy.
A	client
A	server
A	RMI
A	object
Q	In GFS, Chunk replicas are created for three reasons: _____
A	chunk creation, re-replication, and rebalancing
A	chunk deletion, re-replication, and rebalancing
A	chunk creation, re-replication, and resharing
A	chunk creation, chunk deletion, and rebalancing
Q	Hide differences in data representation and how a resource is accessed" which type of transparency is this?
A	Relocation
A	Failure
A	Concurrency
A	Access
Q	Logical extension of computation migration is
A	process migration
A	system migration
A	thread migration
A	data migration
Q	Processes on the remote systems are identified by _____
A	host ID
A	host name and identifier

A	identifier
A	process ID
Q	To what extent inconsistencies can be tolerated depends highly on the usage of a
A	replication
A	duplication
A	resource
A	data
Q	The ----------- of distributed system is determined primarily by the degree to which new resource- sharing services can be added and be made available for use by a variety of client programs
A	Openness
A	Resource Sharing
A	Transparency
A	Scalability
Q	Hide that a resource is replicated is known as_____transparency
A	Replication
A	Location
A	Migration
A	Relocation
Q	Hide the failure and recovery of a resource is known as which transparency
A	Failure
A	Location
A	Migration
A	Relocation
Q	Hide where a resource is located which type of transparency is this?
A	Location
A	Migration
A	Relocation
A	Access
Q	What is WPA?
A	wi-fi protected access
A	wired protected access
A	wired process access
A	wi-fi process access
Q	Which is not an examples of state information ?
A	Mounting information
A	Description of HDD space
A	Session keys
A	Lock status
Q	What are the advantages of file replication ?
A	Improves availability &performance
A	Decreases performance
A	They are consistent

A   Improves speed

Q   The portion of the process scheduler in an operating system that dispatches processes is concerned with _____

A   assigning ready processes to CPU

A   assigning ready processes to waiting queue

A   assigning running processes to blocked queue

A   assigning new processes to cpu

Q   What are the characteristics of data migration?

A   transfer data by entire file or immediate portion required

A   transfer the computation rather than the data

A   execute an entire process or parts of it at different sites

A   execute limited portion of data

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Q   Which one of the following is not shared by threads?

A   program counter

A   stack register

A   program counter and stack

A   register

Q   A process can be _____

A   single threaded

A   tripalthreaded

A   single threaded and multithreaded

A   doublethreaded

Q   Replication should be used when which of the following exist?

A   When transmission speeds and capacity in a network prohibit frequent refreshing of large tables.

A   When using many nodes with different operating systems and DBMSs and database designs.

A   The application's data can be somewhat out-of-date.

A   When using some nodes with selected operating system.

Q   Storing a separate copy of the database at multiple locations is which of the following?

A   Data Replication

A   Horizontal Partitioning

A   Vertical Partitioning

A   Horizontal and Vertical Partitioning

Q   A distributed database is which of the following?

A   A single logical database that is spread to multiple locations and is interconnected by a network

A	A loose collection of file that is spread to multiple locations and is interconnected by a network
A	A single logical database that is limited to one location.
A	A loose collection of file that is limited to one location.
Q	Which of the following is a disadvantage of replication?
A	Reduced network traffic
A	If the database fails at one site, a copy can be located at another site.
A	Each site must have the same storage capacity.
A	Each transaction may proceed without coordination across the network.
Q	Message passing provides a mechanism to allow processes to communicate and to synchronize their actions _____
A	By sharing the same address space
A	without sharing the same address space
A	by sharing the same Process Identifier
A	by sharing the same process number
Q	Which layer is the layer closest to the transmission medium ?
A	Physical
A	Data link
A	Network
A	Transport
Q	A group server is responsible for_____ & _____ groups
A	clean and deduct
A	program and make funtional
A	create and destroy
A	advance and fail
Q	TCP is reliable _____ protocol which supports reliable point to point communication in distributed system.
A	network
A	transport
A	communication
A	system
Q	Communication channels may suffer through
A	protocol
A	transport
A	arbitrary failures
A	reliable communication
Q	Arbitrary failure may ouccur in form of
A	duplicate message
A	protocol
A	reliable communication
A	address spacde
Q	SRM protocol stands for
A	Scalable Reliable Multispreading

A	Scalable Recovery Multicasting
A	Scalable Reliable Multicasting
A	Scalable Recovery Multispreading
Q	In RPC system, which of the following failure may not occur
A	The client cannot locate server
A	The client crashes after sending a request
A	The server crashs after receiving a request
A	The request message from the client to the server is obtained

MODULE 6

Q	Hide the failure and recovery of a resource is known as which transparency
A	Failure
A	Location
A	Migration
A	Relocation
Q	Hide where a resource is located which type of transparency is this?
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Q	Which application-level protocol plays a crucial role in carrying out the data definition and manipulation in addition to X-500 features?
A	TCP
A	LDAP
A	FTP
A	UDP
Q	X.500 Directory Service is a standard way to develop an electronic directory of people in an organization so that it can be part of a available to anyone in the world with Internet access.
A	social directory
A	local directory
A	global directory
A	personal directory
Q	X.500 Directory is also called
A	global Yellow Pages directory
A	global Blue Pages directory
A	global White Pages directory
A	global Black Pages directory
Q	In X.500 Directory you can search for hundreds of thousands of people from a single place on the _____.
A	World Wide Web.
A	at one place
A	World directory
A	Words largest file
Q	The distributed global directory works through a _____ and one or more central places that manage many directories.
A	registration process
A	saccession process
A	application process
A	distribution process
Q	X.500 directory uses _____.
A	User Information Tree
A	Directory Information Tree
A	Person Information Tree
A	system Information Tree
Q	In X.500, each local directory is called a _____.
A	Directory System Agent
A	Local System Agent
A	Personal System Agent
A	Secret System Agent
Q	In X.500 the user interface program for access to one or more DSAs is a _____.
A	Directory User Agent

A	System User Agent
A	Network User Agent
A	World User Agent
Q	DUAs include whois, finger, and programs that offer a_____.
A	graphical user interface.
A	system interface.
A	Local user interface.
A	global user interface.
Q	X.500 is implemented as part of the _____ in its Global Directory Service
A	Distributed Computing Environment
A	User fraindly Environment
A	Global Computing Environment
A	World Computing Environment
Q	X.500 is a way to route e-mail as well as to provide name lookup, using the _____.
A	Lightweight Directory Access Protocol
A	Directory Access Protocol
A	Global Directory Access Protocol
A	Local Directory Access Protocol
Q	X.500 is a series of _____ covering electronic directory services.
A	system standards
A	networking standards
A	computer networking standards
A	operating system standards
Q	The protocols defined by X.500 include
A	DISP,DOP
A	TCP,IP
A	ISO,OSI
A	IP
Q	GNS allows you to locate services via an _____ wherever the service is located, whether on the local system or on a remote node.
A	user name
A	arbitrary name
A	system name
A	address name
Q	The _____ can be deployed such that it services all or a portion of your Qnet nodes. And you can have redundant GNS servers.
A	GNS server
A	IS server
A	DNS server
A	system server
Q	Google Distributed System is

A	arbitrary system
A	search engine is now a major player in cloud computing.
A	GNS server
A	computer networking standards
Q	Google is a _____based corporation
A	Japan
A	US
A	Rasia
A	UK
Q	Google was born out of a research project at Standford with the company launched in
A	1995
A	1992
A	1997
A	1998
Q	In global google sysytem The user can expect query result in
A	0.7 seconds
A	0.4 seconds
A	0.2 seconds
A	0.8 seconds
Q	to locate and retrieve the contents of the web and pass the content onto the indexing subsystem. Performed by a software called
A	Googlebot.
A	Gobot.
A	bot.
A	lebot.
Q	In global google sysytem indexing define as
A	index for the contents of the web that is similar to an index at the back of a book
A	Serial nos
A	Serial nos in parrallel
A	index of data
Q	In global google system index of links is also maintained to keep track of
A	links to a given site
A	links of user
A	links to programs
A	links of user queries
Q	In global google system Ranking algorithm is called
A	SyatemRank
A	LinkRank
A	PageRank
A	IPRank

Q	In global google system offering application-level software over the Internet as
A	web application
A	user application
A	link application
A	system application
Q	With the launch of Google App Engine, Google went beyond _____.
A	software as a service
A	service provider
A	quality as a service
A	data as a service
Q	Other organizations are able to run their _____on the Google platform.
A	own web applications
A	own services
A	own queries
A	own network programs