

Note: "These are sample MCQs to indicate pattern, may or may not appear in examination"

Program & Branch	BE Computer Engineering
Curriculum Scheme	Revised 2012
Examination	Final Year Semester VIII
Subject Name (with Subject Code):	Parallel and Distributed Systems (CPC803)
Question Paper Set-04	

Time: 1 hour

Max. Marks: 50

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Note to the students: - All the Questions are compulsory and carry equal marks.

Q1	SIMD represents an organization that
Option A	refers to a computer system capable of processing several programs at the same time.
Option B	represents organization of single computer containing a control unit, processor unit and a memory unit.
Option C	includes many processing units under the supervision of a common control unit
Option D	Includes many processing units and many control units.
Q2	Handler's Classification is based on
Option A	Multiplicity of data streams
Option B	Serial vs parallel processing
Option C	Multiplicity of instruction and data stream
Option D	Degree of parallelism and pipelining
Q3	In Singhal Heuristic Mutual exclusion algorithms, Synchronization delay is _____
Option A	3T
Option B	T
Option C	2T
Option D	4T
Q4	The time period for which the unit is idle is called as
Option A	Stall
Option B	Scheduling
Option C	Hazards
Option D	Nothing
Q5	Which one is not a feature of the process migration?
Option A	Efficiency
Option B	Transparency

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Option C	Maximum Interference
Option D	Robustness
Q6	Which of the following is not a parallel programming model
Option A	Message Passing Model
Option B	Data parallel model
Option C	Shared memory model
Option D	Architectural model
Q7	Which one is not goal of Task assignment algorithm
Option A	Minimization of IPC cost
Option B	Low degree of parallelism
Option C	Quick turnaround time for the complete process
Option D	Efficient utilization of system resource in general
Q8	_____ is a physical clock synchronization Algorithm
Option A	Vector time stamp
Option B	Berkeley
Option C	Lamport
Option D	Ring
Q9	The support of diverse hardware, diverse operating system platforms, diverse network and use of different languages for implementation is called
Option A	Reliability
Option B	Accessibility
Option C	Heterogeneity
Option D	Availability
Q10	A replica is more _____ compared to a cached copy
Option A	Non-Persistent and Insecure
Option B	Insecure and Accurate
Option C	Inaccurate and Insecure
Option D	Accurate, Persistent and Secure
Q11	If one site fails in distributed system, _____
Option A	the remaining sites can continue operating
Option B	all the sites will stop working
Option C	directly connected sites will stop working
Option D	network fails completely
Q12	_____ that do not have parallel processing capability.
Option A	SISD
Option B	SIMD

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Option C	MISD
Option D	MIMD
Q13	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
Q14	SIMD is a scheme of
Option A	Fengs classification
Option B	Handler classification
Option C	Shore Classification
Option D	Flynn Classification
Q15	What is mean by release consistency
Option A	Absolute time ordering of all shared accesses matters.
Option B	All processes see all shared accesses in the same order. Accesses are not ordered in time
Option C	Shared data can be counted on to be consistent only after a synchronization is done
Option D	Shared data are made consistent when a critical region is exited
Q16	The situation where the data operands are not available is called
Option A	Data Hazards
Option B	Stock
Option C	Deadlock
Option D	Structural Hazards
Q17	If no updates take place for a long time, all replicas will gradually become consistent. This form of consistency is called _____.
Option A	Continuous Consistency
Option B	Causal Consistency
Option C	Sequential Consistency
Option D	Eventual Consistency
Q18	The following computers focus on vector operations
Option A	MIMD
Option B	SIMD
Option C	SISD
Option D	MISD
Q19	If a process is executing in its critical section _____
Option A	any other process can also execute in its critical section
Option B	no other process can execute in its critical section

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Option C	one more process can execute in its critical section
Option D	Many process can execute it its critical section
Q20	RMI stands for
Option A	REMOTE MEMORY INSTALLATION
Option B	REMOTE MEMORY INVOCATION
Option C	REMOTE METHOD INSTALLATION
Option D	REMOTE METHOD INVOCATION
Q21	Election message is always sent to the process with _____.
Option A	Lower number
Option B	Higher number
Option C	Requesting process
Option D	Requesting Lower number of resources
Q22	The capability of a system to adapt the increased service load is called _____
Option A	Capacity
Option B	Tolerance
Option C	Scalability
Option D	Performance
Q23	The layer, which provides the interface that client and server application objects to interact with each other is
Option A	INCREASING
Option B	COUNT
Option C	BIT
Option D	STUB/SKELETON
Q24	In RPC, the client's OS sends the message to the remote OS using
Option A	THE TRANSPORT LAYER
Option B	THE PHYSICAL LAYER
Option C	THE DATALINK LAYER
Option D	THE PRESENTATION LAYER
Q25	All the process submitted by user are distributed among the nodes of the system so as to equalize the workload among nodes is called as
Option A	Load -balancing approach
Option B	Load-sharing approach
Option C	Task assignment approach
Option D	Static approach

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Program: BE Mechanical Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester - VIII

Course Code: MEC803

Course Name: Refrigeration and Air Conditioning

Time: 1 hour

Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	For a given temperature T_1 , as the difference between T_1 and T_2 increases, the COP of a Carnot heat pump
Option A:	Increases
Option B:	Decreases
Option C:	first increases, then decreases
Option D:	first decreases, then increases
Q2.	Bell Coleman cycle is a reversed
Option A:	Rankine cycle
Option B:	Otto cycle
Option C:	Joule cycle
Option D:	Carnot cycle
Q3.	In refrigeration system, the expansion device is connected between the
Option A:	Compressor and condenser
Option B:	Condenser and receiver
Option C:	Receiver and evaporator
Option D:	Evaporator and compressor
Q4.	EER is the ratio of
Option A:	Cooling capacity/ Power input

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Option B:	Power input / Cooling capacity
Option C:	Heat input / Work output
Option D:	Work output / Heat input
Q5.	The highest temperature during the cycle, in a vapour compression refrigeration system, occurs after
Option A:	Compression
Option B:	Condensation
Option C:	Expansion
Option D:	Evaporation
Q6.	Which of the following refrigerant has the lowest boiling point ?
Option A:	Ammonia
Option B:	Carbon dioxide
Option C:	Sulphur dioxide
Option D:	R-12
Q7.	The thermostatic expansion valve is also called
Option A:	Constant pressure valve
Option B:	Constant temperature valve
Option C:	Constant superheat valve
Option D:	Constant flow valve
Q8.	In hermetically sealed compressor unit
Option A:	Compressor is sealed
Option B:	Either compressor & Motor is sealed
Option C:	Motor is sealed
Option D:	Compressor & Motor are sealed

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Q9.	Which of the following is not a desirable property of a refrigerant?
Option A:	High risibility with oil
Option B:	Low boiling point
Option C:	Good electrical conductor
Option D:	Large latent heat
Q10.	Natural draft cooling towers are mainly used in the
Option A:	Steel industry
Option B:	Alumina industry
Option C:	Fertilizer industry
Option D:	Power stations
Q11.	In aqua-ammonia and Li-Br water absorption refrigeration systems, the refrigerant is respectively
Option A:	Ammonia and water
Option B:	Water and water
Option C:	Ammonia and Li-Br
Option D:	Water and Li-Br
Q12.	In Electrolux Refrigerator, hydrogen gas circulates between
Option A:	Absorber and heat exchanger
Option B:	Evaporator and Condenser
Option C:	Absorber and Evaporator
Option D:	Rectifier and Condenser
Q13.	A thermoelectric refrigeration system requires :
Option A:	A high voltage AC input

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Option B:	A low voltage AC input
Option C:	A high voltage DC input
Option D:	A low voltage DC input
Q14.	When the rate of evaporation of water is zero, the relative humidity of the air is
Option A:	0%
Option B:	100%
Option C:	50%
Option D:	75%
Q15.	The temperature of air recorded by a thermometer, when its bulb is surrounded by a wet cloth exposed to the air, is called
Option A:	Wet bulb temperature
Option B:	Dry bulb temperature
Option C:	Dew point temperature
Option D:	Adiabatic temperature
Q16.	The humidification process, on the psychrometric chart is shown by
Option A:	Horizontal line
Option B:	Vertical line
Option C:	inclined line
Option D:	Curved line
Q17.	Sensible Heat gain in an air conditioning system is Proportional to
Option A:	Temperature difference between WBT of air and temperature of a surface/body
Option B:	DBT of air
Option C:	Temperature difference between DBT of air and temperature of a surface/body
Option D:	WBT of air

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Q18.	Energy Conservation in the air-conditioning of a building can be achieved by
Option A:	Maximizing Infiltration load
Option B:	Minimization of solar heat gain
Option C:	Maximizing Ventilation Load
Option D:	Energy Conservation is not possible
Q19.	The Effective Room sensible Heat (ERSH) where , RSH is Room Sensible Heat , OASH is Outside air sensible heat and BPF is Bypass Factor is given
Option A:	$ERSH = RSH + BPF \div OASH$
Option B:	$ERSH = RSH - BPF \times OASH$
Option C:	$ERSH = RSH - BPF \div OASH$
Option D:	$ERSH = RSH + BPF \times OASH$
Q20.	The surface temperature of a cooling coil t_s which is below the dew point temperature of the supply air is known as
Option A:	Triple point
Option B:	Apparatus dew point or ADP
Option C:	Critical point
Option D:	Boiling point
Q21.	Grand Sensible heat factor (G.S.H.F)is given by where , where T.S.H. is Total Sensible heat, and T.L.H. is Total Latent heat is
Option A:	$GSHF = \frac{T.S.H.}{T.S.H. + T.L.H}$
Option B:	$GSHF = \frac{T.S.H. + T.L.H.}{T.S.H.}$

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Option C:	$GSHF = \frac{T.S.H. - T.L.H.}{T.S.H.}$
Option D:	$GSHF = \frac{T.S.H.}{T.S.H. - T.L.H.}$
Q22.	Two air streams stream 1 with mass m_{a1} and specific enthalpy h_1 and stream 2 with mass m_{a2} and specific enthalpy h_2 are mixed together adiabatically at constant pressure to form as new stream 3. The specific enthalpy of stream 3 h_3 is given by
Option A:	$h_3 = \frac{m_{a1} \cdot h_1 + m_{a2} \cdot h_2}{m_{a1} + m_{a2}}$
Option B:	$h_3 = \frac{m_{a1} \cdot h_2 + m_{a2} \cdot h_1}{m_{a1} + m_{a2}}$
Option C:	$h_3 = \frac{m_{a1} + m_{a2}}{m_{a1} + m_{a2}}$
Option D:	$h_3 = \frac{h_1 + h_2}{m_{a1} + m_{a2}}$
Q23.	A relative humidity of about _____ is maintained for comfort condition for computer room.
Option A:	100%
Option B:	50%
Option C:	20%
Option D:	65%
Q24.	Photographic materials deteriorate fast in
Option A:	High humidity and temperatures
Option B:	Low humidity and temperature
Option C:	High pressure and temperature

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Option D:	High humidity and pressure
Q25.	In printing industries control of ____ is must
Option A:	Air velocity
Option B:	Humidity
Option C:	Purity of air
Option D:	Temperature of air

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Program: BE Electronics and Telecommunication Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VIII

Course Code and Course Name: ETC803 and Internet and Voice Communication

Time: 1 hour

Max. Marks: 50

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Name of the Question Bank Generator: Dr.Kevin Prathap Noronha

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NOTE to the Question Bank Generator:

1. The question bank consists of 25 MCQ questions with each question carrying a maximum of 2 marks. It should cover all the modules with appropriate weightages.
 2. You need to check the questions and their answers for their correctness. There should not be any ambiguity in the questions and the options. Only one option should be the Correct Answer.
 3. You must ensure that the same question is not repeated again in this question paper.
 4. Among 25-questions, 13 questions can be under the 'Simple' category, 7-questions can be under the 'Moderate' category, and the remaining 5-questions can be under the 'Difficult' category.
 5. Please do not reveal answer on this Question Paper.
 6. Use another template provided to enter the correct answers.
 7. Please save the file with file name: 'R2016-ET-QP-Sem6-Course_Name.doc'
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Note to the students:- All Questions are compulsory and carry equal marks .

Q1.	In the OSI model, what is the main function of the transport layer?
Option A:	Process-to-process message delivery
Option B:	Updating and maintenance of routing tables
Option C:	Synchronization
Option D:	Node-to-node delivery

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Q2.	Which layer is responsible for making & maintaining connection and synchronization between transmitter and receiver?
Option A:	Presentation
Option B:	Physical
Option C:	Application
Option D:	Session
Q3.	Which address, also known as the link address, is the address of a node as defined by its LAN or WAN?
Option A:	IP
Option B:	Port
Option C:	Specific
Option D:	Physical
Q4.	The DHCP server issues a _____ command on _____ UDP port number
Option A:	active open,67
Option B:	passive open,67
Option C:	active open,68
Option D:	passive open,68
Q5.	Which DNS client maps an address to a name or a name to an address especially when required by a host?
Option A:	Resolver
Option B:	Mapper
Option C:	Primary Server
Option D:	Secondary Server
Q6.	Application layer offers _____ delivery.

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Option A:	Process to process
Option B:	Host to host
Option C:	End to end
Option D:	Router to host
Q7.	The domain name system is maintained by _____.
Option A:	distributed database system
Option B:	a single server
Option C:	a single computer
Option D:	central system
Q8.	Which of the following is not a flag field in TCP?
Option A:	URG
Option B:	PSH
Option C:	RST
Option D:	TTL
Q9.	What allows TCP to detect lost segments and in turn recover from that loss?
Option A:	Sequence number
Option B:	Acknowledgment number
Option C:	Checksum
Option D:	Both Sequence & Acknowledgment number
Q10.	This is not related to Transmission control protocol
Option A:	is a connection-oriented protocol
Option B:	uses a three way handshake to establish a connection
Option C:	receives data from application as a single stream
Option D:	Security

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Q11.	Using which method in transport layer data integrity can be ensured?
Option A:	Checksum
Option B:	Cyclic redundancy checks
Option C:	Error correcting codes
Option D:	FCS
Q12.	This is not an error reporting message in ICMP
Option A:	Echo request or reply
Option B:	Destination unreachable
Option C:	Source quench
Option D:	Time exceeded
Q13.	This is the Network mask for Class B
Option A:	255.255.255.0
Option B:	255.255.0.0
Option C:	255.0.0.0
Option D:	255.0.255.0
Q14.	One of the addresses in a block is 168.199.170.82/27. The first and last address of this block are
Option A:	168.199.170.64/27 and 168.199.170.95/27.
Option B:	168.199.170.74/27 and 168.199.170.85/27.
Option C:	168.199.170.84/27 and 168.199.170.85/27.
Option D:	168.199.170.94/27 and 168.199.170.85/27.
Q15.	An ISP has requested a block of 1000 addresses. The prefix length for the block is
Option A:	/26

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Option B:	/22
Option C:	/24
Option D:	/28
Q16.	In an IP packet, the value of HLEN is 1000 in binary. How many bytes of options are being carried by this packet?
Option A:	28
Option B:	32
Option C:	26
Option D:	24
Q17.	MPEG1 was designed for a
Option A:	CD-ROM with a data rate of 1.5 Mbps
Option B:	for high-quality DVD with a data rate of 3 to 6 Mbps.
Option C:	for high-quality DVD with a data rate of 4 to 8 Mbps.
Option D:	CD-ROM with a data rate of 2.5 Mbps
Q18.	For sending a compressed audio/video file using a Web Server
Option A:	The client (browser) can use the services of FTP and send a GET message to download the file
Option B:	The client (browser) can use the services of HTTP and send a GO message to download the file
Option C:	The client (browser) can use the services of HTTP and send a HELLO message to download the file
Option D:	The client (browser) can use the services of HTTP and send a GET message to download the file
Q19.	In a leaky bucket used to control liquid flow, how many gallons of liquid are left in the bucket if the output rate is 5 gal/min, there is an input burst of 100 gal/min for 12 s, and there is no input for 48 s?

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Option A:	15 gal
Option B:	19 gal
Option C:	17 gal
Option D:	25 gal
Q20.	In Real-Time Transport Protocol (RTP), source periodically sends a source description message to give additional information about
Option A:	Others.
Option B:	Itself.
Option C:	Protocols.
Option D:	Packets.
Q21.	Session Initiation Protocol (SIP), has a mechanism which finds the
Option A:	Domain.
Option B:	Way.
Option C:	Terminal.
Option D:	IP Address.
Q22.	In Voice Over IP, Term SIP stands for
Option A:	Session Initiation Path.
Option B:	Session Initiation Port.
Option C:	Session Initiation Protocol.
Option D:	Session Initiation Packet.
Q23.	In Real-Time Transport Protocol (RTP), A source sends a bye message to shut down a
Option A:	System.
Option B:	Frames.
Option C:	IP.

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Option D:	Stream.
Q24.	To perform tracking of an IP, Session Initiation Protocol (SIP), uses concept of
Option A:	Termination.
Option B:	Registration.
Option C:	Streaming.
Option D:	Translation.
Q25.	A simple session using Session Initiation Protocol (SIP), consists of three modules: establishing, communicating, and
Option A:	Transmission.
Option B:	System.
Option C:	Streaming.
Option D:	Terminating.

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Program: BE Information Technology

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VIII

Course Code: **ITC 803** and Course Name: **Computer Simulation and Modeling**

Time: 1 hour

Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	What is a pseudo random number generator?
Option A:	An algorithm that generates random numbers according to mathematical formula.
Option B:	An algorithm that generates random numbers according to user activity.
Option C:	An algorithm that generates random numbers according to time.
Option D:	An algorithm that generates random numbers with help of user input.
Q2.	A _____ system is described by its calling population, arrival and service mechanism and system capacity.
Option A:	response
Option B:	waiting
Option C:	queuing
Option D:	simulated
Q3.	A modeler wishes to develop a reasonably, but not overly, complex model. Which type of software is he/she most likely to use?
Option A:	Simulation package
Option B:	Programming language
Option C:	A spreadsheet
Option D:	Simulation software
Q4.	The probability p that a patient with a certain disease will be successfully treated with a new medical treatment is 0.8. Suppose that the treatment is used on 40 patients.

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	What is the "expected value" of the number of patients who are successfully treated?
Option A:	40
Option B:	50
Option C:	8
Option D:	32
Q5.	Which one of these variables is a continuous random variable?
Option A:	The time it takes a randomly selected student to complete an exam.
Option B:	The number of tattoos a randomly selected person has.
Option C:	The number of women taller than 68 inches in a random sample of 5 women.
Option D:	The number of correct guesses on a multiple-choice test.
Q6.	Which of the following is NOT a level of abstraction of computer systems?
Option A:	Computer program level
Option B:	Computer network level
Option C:	Computational/gate level
Option D:	Processor level
Q7.	In simulation of manufacturing systems, WIP stands for _____
Option A:	Waste in process
Option B:	Waste in progress
Option C:	Work in process
Option D:	Work in progress
Q8.	Validation should be an _____ of model development.
Option A:	Intermediary task
Option B:	Integral part
Option C:	Isolated task

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Option D:	Individual task
Q9.	AR(1) model and EAR(1) model are _____
Option A:	multivariate input models
Option B:	goodness-of-fit models
Option C:	time-series input models
Option D:	empirical models
Q10.	The _____ or debugger is an essential component of successful model building.
Option A:	Internet Relay Chat (IRC)
Option B:	Interactive Run Controller (IRC)
Option C:	Inspection Release Certificate (IRC)
Option D:	Import Registration Certificate (IRC)
Q11.	Input-Output validation can be performed using _____
Option A:	historical input data and Turing Test
Option B:	historical input data and Uniformity Test
Option C:	historical input Data and Independence Test
Option D:	uniformity and Independence Test
Q12.	When no data is available for simulation, _____ distributions are used.
Option A:	Uniform, Beta, Erlang
Option B:	Uniform, Triangular, Beta
Option C:	Beta, Triangular, Erlang
Option D:	Weibull, Triangular, Beta
Q13.	_____ method is applied when a random variable X can be expressed as a sum of

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	other random variables that are identically independently distributed.
Option A:	Convolution
Option B:	Inverse Transform
Option C:	Linear Congruential
Option D:	Acceptance Rejection
Q14.	Which of the following statistical methods are commonly used to analyze simulation results?
Option A:	Analysis of variance
Option B:	T-Test
Option C:	Regression Analysis
Option D:	Futuristic Analysis
Q15.	Random digits are converted to random number by placing a _____ appropriately.
Option A:	decimal point
Option B:	comma
Option C:	zero
Option D:	semi-colon
Q16.	A/an _____ is called a record of an event to occur at the current or future time along with an associated data.
Option A:	List
Option B:	Event notice
Option C:	Attributes
Option D:	Stem state
Q17.	In a simulation table, _____ represents simulated time.
Option A:	activity

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Option B:	delay
Option C:	event
Option D:	clock
Q18.	When the outcome of an activity can be described completely in terms of its input the activity is said to be _____ .
Option A:	deterministic
Option B:	stochastic
Option C:	endogenous
Option D:	exogenous
Q19.	A delay is sometimes called as _____ wait and an activity as _____ wait.
Option A:	short, long
Option B:	long, short
Option C:	unconditional, conditional
Option D:	conditional, unconditional
Q20.	Time advance algorithm is also known as _____ .
Option A:	event advancement
Option B:	event notification
Option C:	event scheduling
Option D:	event processing
Q21.	In _____ distribution, the parameters are observed values of sampled data.
Option A:	continuous
Option B:	discrete
Option C:	empirical
Option D:	experimental

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Q22.	Which one of these is NOT a queuing discipline?
Option A:	Last in first out
Option B:	First in last out
Option C:	First in first out
Option D:	Shortest processing time first
Q23.	In hypothesis testing, the level of significance is represented by _____.
Option A:	μ
Option B:	α
Option C:	β
Option D:	λ
Q24.	Which Goodness-of-fit test requires data to be placed in class intervals ?
Option A:	Kolmogorov – Smirnov test
Option B:	Chi-square test
Option C:	Gap test
Option D:	Auto-correlation test
Q25.	A quantile- quantile plot is used for evaluating _____ .
Option A:	class intervals
Option B:	degree of freedom
Option C:	frequency of occurrence
Option D:	distribution fit

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Program: BE Instrumentation Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VIII

Course Code: ISC803, Course Name: Instrument and System Design

Time: 1hour

Max. Marks: 50

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Note to the students: - All Questions are compulsory and carry equal marks.

Q.1	The ratio of output signal or response of the instrument to an unit change in input or measured variable is called
Option A:	Sensitivity
Option B:	Precision
Option C:	Resolution
Option D:	Accuracy
Q2.	Accuracy of standard pressure gauges, used for testing and calibration purposes is of the order of
Option A:	$\pm 1.5\%$
Option B:	$\pm 1\%$
Option C:	$\pm 5\%$
Option D:	$\pm 0.25\%$
Q3.	Thermocouples are installed in pipeline with
Option A:	remote seal connection
Option B:	flanged connection
Option C:	welding
Option D:	threaded connection

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Q4.	conversion of liquid to vapours and back to liquid when flowing through valve is called
Option A:	Flashing
Option B:	Cavitation
Option C:	tight shut off
Option D:	stiction
Q5.	When the percentage of flow through a valve equals the percentage of plug movement, a valve
Option A:	Equal percentage flow characteristic
Option B:	Linear flow characteristic
Option C:	Quick opening flow characteristic
Option D:	Curved flow characteristic
Q6.	Calculate the necessary Cv rating for a liquid service valve, given a pressure drop of 24 PSID, a specific gravity of 1.3, and a maximum flow rate of 140 GPM. Assume there will be no flashing or choked flow through the valve.
Option A:	0.1319
Option B:	7.583
Option C:	32.58
Option D:	2585
Q7.	control valve noise can be reduced by _____
Option A:	using thermal or acoustic insulation downstream of the valve
Option B:	using canopy
Option C:	using cage trim
Option D:	using extended diaphragm
Q8.	Flashing in control valve
Option A:	is first stage of cavitation

Note: "These are sample MCQs to indicate pattern, may or may not appear in examination"

Option B:	last stage of cavitation
Option C:	is when noise level decreases in valves
Option D:	is due to two valves connected in parallel in pipeline
Q9.	In a gas control valve, choking occurs when
Option A:	the velocity of the gas reaches the speed of sound for that gas.
Option B:	the velocity of the gas increases with valve opening .
Option C:	the velocity of the gas is less than speed of sound for that gas.
Option D:	the velocity of the gas decreases with valve opening.
Q10.	Testing tank of _____ height is required as a minimum to create 1 PSI drop across control valve
Option A:	1 meter
Option B:	0.001 meter
Option C:	0.0001 meter
Option D:	0.01 meter
Q11.	_____ is considered for valve sizing when valve upstream and downstream line sizes are different
Option A:	Expansion factor
Option B:	pressure recovery factor
Option C:	pressure drop ratio
Option D:	Piping geometry factor
Q12.	following are wiring accessories
Option A:	Lugs and ferrules
Option B:	MCB & MCCB
Option C:	crimping machine and relays
Option D:	cable tray and JB

Note: "These are sample MCQs to indicate pattern, may or may not appear in examination"

Q13.	console Ergonomics provides
Option A:	comfort to an operator in control room
Option B:	easy troubleshooting
Option C:	testing and calibration of panels
Option D:	wiring of cables
Q14.	_____ control panel improves the visual quality of both upper and lower panel sections
Option A:	vertical flat
Option B:	standing console
Option C:	desk console
Option D:	break front
Q15.	Average Eye level to be consider while designing slant top panelv is _____
Option A:	65 inches
Option B:	0.65 inches
Option C:	100 inches
Option D:	25 inches
Q16.	_____pressurization is defined to reduce classification within the enclosure from Class I or II, Division 1 to non-hazardous
Option A:	Type X
Option B:	Type Y
Option C:	Type Z
Option D:	Type X,Y,Z
Q17.	Pressurised panels are used in
Option A:	safe area

Note: "These are sample MCQs to indicate pattern, may or may not appear in examination"

Option B:	hazardous area
Option C:	dust environment
Option D:	control Room
Q18.	Multi point grounding is preferred for
Option A:	Frequencies lower than 20 KHz.
Option B:	Frequencies above 1 MHz.
Option C:	Frequencies less than 1 MHz.
Option D:	Frequencies between 20 Hz to 20 KHz.
Q19.	Enclosure provides
Option A:	Degree of protection to enclosed equipments
Option B:	Heat dissipation
Option C:	heat transmission
Option D:	shielding for equipment
Q20.	Engineering activities involved during technical feasibility phase are
Option A:	Examine operational requirement
Option B:	testing
Option C:	final detailed design
Option D:	finalise QC procedures
Q21.	_____reduces electrical noise and reduces its impact on signals and also lowers electromagnetic radiation
Option A:	shielding
Option B:	grounding
Option C:	ex proof design
Option D:	wp protection

Note: "These are sample MCQs to indicate pattern, may or may not appear in examination"

Q22.	_____ is a reliability term used to provide the amount of failures per million hours for a product.
Option A:	Mean Time to Failure
Option B:	Mean Time Between Failure
Option C:	Mean Time to Repair
Option D:	Failure in Time
Q23.	In bathtub curve early failure period is called _____
Option A:	infant mortality
Option B:	Random failure
Option C:	wear out failure
Option D:	observed failure rate
Q24.	control room design layout is conceived during _____
Option A:	conceptual design phase of control room project
Option B:	last phase of project
Option C:	after system procurement phase
Option D:	pre commissioning phase
Q25.	control room layout facilitates
Option A:	Housing of cabinets and consoles
Option B:	air headers
Option C:	space for field instruments
Option D:	space for chemical equipments