

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

Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: **CSC603** and Course Name: **Data Warehousing and Mining**

Time: 1hour

Max. Marks: 50

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

Q1.	Star schema consists of
Option A:	Dimension table
Option B:	Fact tables
Option C:	multiple Dimension tables and a fact tables
Option D:	Multiple fact tables and multiple dimension table
Q2.	Which of the following is also called as web Content mining
Option A:	Web Text Mining
Option B:	Multimedia Mining
Option C:	Web usage mining
Option D:	Web structure mining
Q3.	The purpose of data warehouse is to provide _____ data that is not stored in the operational environment.
Option A:	Summary
Option B:	Denormalized
Option C:	Normalized
Option D:	Informational
Q4.	Dimensionality refers to
Option A:	Cardinality of key values in a star schema
Option B:	The data that describes the transactions in the fact table
Option C:	The level of detail of data that is held in the fact table
Option D:	The level of detail of data that is held in the dimension table
Q5.	_____ focuses on analysis of the hyperlink structure of the web and one of its purposes is to identify more preferable documents.
Option A:	Web content Mining
Option B:	Web Usage mining
Option C:	Web data mining

Option D:	Web Structure Mining
Q6.	Regression is used for
Option A:	classification
Option B:	clustering
Option C:	association
Option D:	prediction
Q7.	Which of the following is not an advantage of association rules?
Option A:	The rules are transparent and easy to understand
Option B:	Generates clear and simple rules
Option C:	Generates too many rules
Option D:	Used to find correlations and co-occurrences between data sets
Q8.	If particular data warehouse in organization provides information about product, customers, suppliers, sales, revenue and does not focus on the ongoing operations ,it is feature of data warehouse is
Option A:	Integrity
Option B:	Subject Oriented
Option C:	Non Volatile
Option D:	Time Variant
Q9.	In KDD, the next step after data preprocessing is
Option A:	Data mining
Option B:	Data transformation
Option C:	Data evaluation
Option D:	Data selection
Q10.	The final step in the data mining process is
Option A:	Data Cleaning
Option B:	Data Preprocessing
Option C:	Modeling
Option D:	Data Visualization
Q11.	Why integration of spatial data is one of the challenging issues regarding the construction and utilization of spatial Data warehouse
Option A:	Because data formats are very simple and not efficient for analytics
Option B:	Such records are difficult to collect from source so integration is not possible
Option C:	It comes from heterogenous sources and systems
Option D:	It if generated with a very fast speed so integration is not possible
Q12.	In dimensional data modeling storage unit used are
Option A:	Cubes
Option B:	Tables
Option C:	Dimensions
Option D:	Views

Q13.	Web content mining is also different from Text mining because of the _____ nature of the Web, while Text mining focuses on _____ texts
Option A:	Unstructured, Structured
Option B:	Semi-Structure, Unstructured
Option C:	Structured, Semi-Structured
Option D:	Unstructured, Semi-Structured
Q14.	Size = {small, medium, large} is which type of attribute
Option A:	Binary
Option B:	Ordinal
Option C:	Continuous
Option D:	Interval
Q15.	How can we best represent 'Confidence' for the following association rule: If Bread and Jam, then Milk".
Option A:	{Bread, Jam, Milk }/(Bread, Jam)
Option B:	{ Bread, Jam , Milk}/(Total number of transactions)
Option C:	{Milk}/{ Bread, Jam }
Option D:	{ Bread, Jam }/(Milk)
Q16.	Which algorithm is not used to build Decision Tree
Option A:	ID3
Option B:	C4.5
Option C:	K-Means
Option D:	CART
Q17.	What is the method to interpret the results after rule generation?
Option A:	Absolute Mean
Option B:	Mean squared error
Option C:	Lift ratio
Option D:	Gini index
Q18.	Which of the following involves analyzing complex relationships among thousands or even millions of data items stored in data marts, data warehouses, and other multidimensional databases to discover patterns, trends, and exception conditions?
Option A:	OLTP
Option B:	OLAP
Option C:	OISE
Option D:	OTLP
Q19.	Credit approval based on customer data can be done using
Option A:	Clustering
Option B:	Classification

Option C:	Frequent Pattern Mining
Option D:	Spatial Mining
Q20.	Which of the following is not true for K Medoids technique
Option A:	Handles outliers well
Option B:	Ordering of input does not impact results
Option C:	Initial set of K medoids if fixed
Option D:	Does not scale well
Q21.	Choose the correct processing technique for the given statements. Identify correlation between salary structure and policies sold made by Insurance agents in an organization.
Option A:	OLTP
Option B:	OLAP
Option C:	OLAM
Option D:	OTLP
Q22.	What will happen if support is reduced?
Option A:	Number of frequent item sets remains same.
Option B:	Some item sets will add to the current set of frequent item sets.
Option C:	Some item sets will become infrequent while others will become frequent
Option D:	Can't Predict
Q23.	In SQL the cross-tabs are created using
Option A:	Slice
Option B:	Dice
Option C:	Pivot
Option D:	Roll up
Q24.	In a Confusion Matrix False Positive means
Option A:	Class members which are classified as class members
Option B:	Class non-members which are classified as class non-members
Option C:	Class non-members which are classified as class members
Option D:	Class members which are classified as class non-members
Q25.	Data scrubbing is which of the following?
Option A:	A process to upgrade the quality of data after it is moved into a data warehouse
Option B:	A process to upgrade the quality of data before it is moved into a data warehouse
Option C:	A process to load the data in the data warehouse and to create the necessary indexes
Option D:	A process to reject data from the data warehouse and to create the necessary indexes

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: MEC603 and Course Name: Finite Element Analysis

Time: 1 hour

Max. Marks: 50

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

Q1.	The advantage of using FEA in Engineering Analysis is
Option A:	Only simple Geometry can be analyzed
Option B:	Material having different material properties can be analyzed
Option C:	Increases the cost of the design
Option D:	Boundary conditions cannot be handled effectively
Q2.	One method of obtaining approximate solution of a differential equation is
Option A:	Weighted Residual Method
Option B:	Interpolation Method
Option C:	Extrapolation Method
Option D:	Bi-Conjugate Gradient Method
Q3.	The weight function in a subdomain method is
Option A:	0
Option B:	1
Option C:	2
Option D:	3
Q4.	In a Weighted Residual method the weight function is $W_i = \frac{\partial R}{\partial a_i}$ where W_i is the weight function , R is the Residue and a_i are the parameters is
Option A:	Least Square Method
Option B:	Galerkin Method
Option C:	Collocation Method
Option D:	Subdomain Method
Q5.	Sum of all shape functions is equal to
Option A:	Zero
Option B:	-1
Option C:	+1
Option D:	2
Q6.	Following is not the type of Boundary Condition
Option A:	Dirichhlet Boundary Condition
Option B:	Surface Boundary Condition
Option C:	Neumann Boundary Condition
Option D:	Newton Boundary Condition

Q7.	_____ are used to express the geometry or shape of the element.
Option A:	Mode shapes
Option B:	Natural curves
Option C:	Shape functions
Option D:	Boundary Condition
Q8.	Which Parameter is treated as secondary variable in structural Problem
Option A:	Force
Option B:	Acceleration
Option C:	Displacement
Option D:	Velocity
Q9.	The number of nodes for 1 D element are...
Option A:	1
Option B:	2
Option C:	3
Option D:	0
Q10.	Neumann boundary condition is also called as
Option A:	First type boundary condition
Option B:	Second type boundary condition
Option C:	Zero type boundary condition
Option D:	Third type boundary condition
Q11.	For truss analysis, which type of elements are used?
Option A:	Triangle
Option B:	Bar
Option C:	Rectangle
Option D:	Parallelogram
Q12.	In FEA, the solution is said to be converging when
Option A:	Element is converging to a point
Option B:	Residue is tending to zero
Option C:	Order of shape function is increasing
Option D:	Number of element is increasing
Q13.	Elements with an aspect ratio of near to generally yield best results in FEA.
Option A:	0
Option B:	0.5
Option C:	1
Option D:	2
Q14.	If the geometry of the elements are described by a Higher order of shape functions, then these elements are called _____
Option A:	Iso Parametric

Option B:	Axi-symmetric
Option C:	Super Parametric
Option D:	Sub Parametric
Q15.	For Constant Strain triangle element , the shape function is
Option A:	$N_1+N_2+N_3=1$
Option B:	$N_1+N_2+N_3=2$
Option C:	$N_1+N_2+N_3=3$
Option D:	$N_1+N_2+N_3=0$
Q16.	Coordinates of nodes of a finite element are given by A(4,0) and B(8,0). Find the expression of x in terms of ζ when Third node C is taken as (6,0)
Option A:	$\zeta(\zeta + 1)$
Option B:	$1 - \zeta^2$
Option C:	$2\zeta + 6$
Option D:	$\zeta^2 + 2\zeta + 5$
Q17.	The iso Parametric quadrilateral has coordinate (3,1) (6,1), (8,6) (2,5). Determine x coordinate of the point P, which has local coordinate ($\zeta = 0.57735$ & $\eta = 0.57735$)
Option A:	6.44
Option B:	7.44
Option C:	5.44
Option D:	7.22
Q18.	Actual thickness of plane strain element is _____ compared to plane stress element
Option A:	any specified value
Option B:	very large
Option C:	assumed by software
Option D:	assumed by designer
Q19.	_____ conditions exist when the thickness dimension (Usually the z-direction) is much smaller than the length and width dimensions of the solid
Option A:	Plane strain conditions
Option B:	Plane stress conditions
Option C:	Plane tension conditions
Option D:	Plane pressure conditions
Q20.	Number of stress components per node calculated for a triangular axisymmetric element is
Option A:	2
Option B:	3
Option C:	4
Option D:	5

Q21.	Stiffness matrix for 2D CST element
Option A:	$[B]^T[D][B]At$
Option B:	$[B]^0[D][B]At$
Option C:	$[B]^4[D][B]At$
Option D:	$[B]^2[D][B]At$
Q22.	If r_1, r_2, r_3 are radial distances of node 1, 2, 3 respectively of the triangular element of Axisymmetric body, then the radius of centroid r is _____
Option A:	$(r_1 + r_2) / 2$
Option B:	$r_1 / 2$
Option C:	$(r_1 + r_2 + r_3) / 3$
Option D:	$r_3 / 3$
Q23.	If the mass of the beam is assumed to be concentrated at two known points (supports) such a system is called as
Option A:	Consistent mass
Option B:	Lumped Mass
Option C:	Gross Mass
Option D:	Total Mass
Q24.	Lumped Mass matrix is ...
Option A:	Horizontal
Option B:	Vertical
Option C:	Diagonal
Option D:	Zero
Q25.	Find the two natural frequencies of transverse vibrations of a beam fixed at both ends of length 1 unit $EI=10^6$, $\rho * \text{area}=10^6$. Use Lumped mass matrix.
Option A:	68.5, 20.22
Option B:	78.5, 10.22
Option C:	38.5, 90.22
Option D:	18.5, 80.22

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code and Course Name: ECC603, Antenna and Radio Wave Propagation

Time: 1 hour

Max. Marks: 50

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

Q1.	Which theorem should passive antennas satisfy?
Option A:	Radiation
Option B:	Gauss's theorem
Option C:	Reciprocity
Option D:	Efficiency
Q2.	Radio waves sometimes "bend" around a corner because of:
Option A:	reflection
Option B:	diffusion
Option C:	refraction
Option D:	diffraction
Q3.	Sky waves
Option A:	are line-of-sight
Option B:	"bounce" off the ionosphere
Option C:	are same as space waves
Option D:	are radio waves used for satellite communications
Q4.	What is the nature of radiation pattern of an isotropic antenna?
Option A:	Spherical
Option B:	Dough-nut
Option C:	Elliptical
Option D:	Hyperbolic

Q5.	Which layer has the atmospheric conditions exactly opposite to that of standard atmosphere?
Option A:	Depression layer
Option B:	Regression layer
Option C:	Inversion layer
Option D:	Invasion layer
Q6.	If the length of elements of an array is greater than $\lambda/2$, which will be the operating region of an array?
Option A:	Transmission line region
Option B:	Active region
Option C:	Reflective region
Option D:	Saturation region
Q7.	As the substrate thickness increases, surface waves and spurious feed radiation _____.
Option A:	increase
Option B:	decrease
Option C:	remain unaffected
Option D:	disappear
Q8.	In MSA, the theoretical impedance is _____ ohms at the center of the patch.
Option A:	50
Option B:	0
Option C:	100
Option D:	75
Q9.	Under which condition of two unit vectors, the polarization loss factor (PLF) is equal to unity?
Option A:	Perpendicular
Option B:	Perfectly aligned
Option C:	Angle inclination (Ψ_p) = 60°
Option D:	Angle inclination (Ψ_p) = 45°
Q10.	Horn is treated as a/an _____ antenna.
Option A:	linear
Option B:	planar
Option C:	aperture
Option D:	array

Q11.	A parasitic element of an array is one which
Option A:	is directly connected to the transmitter output
Option B:	is spaced at distance $\lambda/2$ from driven element
Option C:	increases signal strength in its own direction
Option D:	acts as a reflector or director depending on whether it is longer or shorter than the driven element
Q12.	A resonant center-fed dipole is connected to a 50 ohm line. It is desired to maintain the input VSWR = 2. What should be the largest input resistance of the dipole.
Option A:	100 ohms
Option B:	50 ohms
Option C:	150 ohms
Option D:	75 ohms
Q13.	Which statement regarding end-fire array is wrong?
Option A:	there is no radiation at right angles to the plane of the array
Option B:	it has a dipole spacing of $\lambda/2$
Option C:	it is called a linear resonant dipole array
Option D:	it has narrow bandwidth
Q14.	What is the gain of an isotropic radiator?
Option A:	-1
Option B:	0
Option C:	5
Option D:	10
Q15.	Consider a vertical earthed antenna. This antenna is resonant when its physical height will be
Option A:	$\lambda/4$
Option B:	$\lambda/2$
Option C:	λ
Option D:	2λ
Q16.	A lossless resonant half-wavelength dipole antenna with input impedance of 73 ohms, is connected to a transmission line whose characteristic impedance is 50 ohms. Assuming that the pattern of the antenna is given approximately by $U = B_o \sin^3 \theta$, The maximum directivity of the antenna is
Option A:	1.697
Option B:	0

Option C:	0.978
Option D:	1
Q17.	In broadside array, all the elements in the array should have similar excitation along with similar amplitude excitation for maximum radiation.
Option A:	Frequency
Option B:	Phase
Option C:	Current
Option D:	Voltage
Q18.	Which element should exist in order to have a $\lambda/4$ -monopole antenna?
Option A:	Anechoic chamber
Option B:	Semiconductor
Option C:	Insulator
Option D:	Ground plane
Q19.	The radiation resistance of half wavelength dipole antenna is
Option A:	$72 + j42.5$ ohms
Option B:	$73 + j42.5$ ohms
Option C:	$71 + j42.5$ ohms
Option D:	$75 + j42.5$ ohms
Q20.	For Yagi-Uda array the term that is not applicable is
Option A:	Good bandwidth
Option B:	High gain
Option C:	Folded dipole
Option D:	Parasitic elements
Q21.	Which among the following is regarded as a condition of an ordinary endfire array where β is the phase excitation and k is the phase constant?
Option A:	$\beta < kd$
Option B:	$\beta > kd$
Option C:	$\beta = \pm kd$
Option D:	$\beta \neq \pm kd$
Q22.	Which expression states qualitatively the behavior in the middle of a $\lambda/2$ -dipole antenna?
Option A:	$V=\max, I=\max$
Option B:	$V=\max, I=\min$
Option C:	$V=\min, I=\max$

Option D:	V=min, I=min
Q23.	A _____ is characterized by a main beam with 3-dB beamwidth and sidelobes at different levels.
Option A:	Radiation Pattern
Option B:	Bandwidth
Option C:	VSWR
Option D:	Polarization
Q24.	Ground waves are most effective:
Option A:	below about 2 MHz
Option B:	above about 20 MHz
Option C:	at microwave frequencies
Option D:	when using horizontally polarized waves
Q25.	A N turn resonant circular loop with a uniform current distribution and with a circumference of $\lambda/4$, is fed by a lossless balanced twin-lead transmission line with characteristic impedance of 300 ohms. The closest integer number of turns so that input impedance is nearly 300 ohms is
Option A:	30π
Option B:	3π
Option C:	300π
Option D:	300

Program: BE Information Technology

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: ITC603 and Course Name: Cloud Computing & Services

Time: 1 hour

Max. Marks: 50

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

Q1.	_____ is an advantage of a multi-tenancy cloud environment over a single-tenancy environment.
Option A:	Cost saving
Option B:	Higher data security
Option C:	Easy to customize
Option D:	Faster performance
Q2.	List out the wrong statement
Option A:	Google's App Engine offers PaaS.
Option B:	The vendor is responsible for all the operational aspects of the service.
Option C:	SaaS requires specific applications to be accessed globally over the internet.
Option D:	The customer is responsible only for his interaction with the platform.
Q3.	Which architectural layer is used as a backend in cloud computing?
Option A:	Network
Option B:	Cloud
Option C:	Client
Option D:	Software

Q4.	Which is the constraint provided by cloud architecture?
Option A:	Cloud Ingress
Option B:	Processor Speed
Option C:	Cloud storage services
Option D:	Network Connection Dependency
Q5.	The VMM is responsible for mapping the guest physical memory to the actual machine memory in guest OS in
Option A:	CPU virtualization
Option B:	OS virtualization
Option C:	Memory virtualization
Option D:	File virtualization
Q6.	A service provider reselling an ____ may have the option to offer one module to customize the information.
Option A:	AaaS
Option B:	CaaS
Option C:	PaaS
Option D:	SaaS
Q7.	Load balancing virtualizes systems and resources by mapping a _____ to a _____
Option A:	logical address to a logical address
Option B:	physical address to a physical address
Option C:	physical address to a logical address
Option D:	logical address to a physical address
Q8.	VMM needs to exhibit three properties in order to correctly satisfy their definition:

	Match the terms with their correct definitions												
	<table border="1"> <tr> <td>1</td> <td>Fidelity</td> <td>A</td> <td>There should be little or no difference in performance between the VM and a physical equivalent.</td> </tr> <tr> <td>2</td> <td>Isolation or Safety</td> <td>B</td> <td>The environment it creates for the VM is essentially identical to the original (hardware) physical machine.</td> </tr> <tr> <td>3</td> <td>Performance</td> <td>C</td> <td>The VMM must have complete control of the system resources.</td> </tr> </table>	1	Fidelity	A	There should be little or no difference in performance between the VM and a physical equivalent.	2	Isolation or Safety	B	The environment it creates for the VM is essentially identical to the original (hardware) physical machine.	3	Performance	C	The VMM must have complete control of the system resources.
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2	Isolation or Safety	B	The environment it creates for the VM is essentially identical to the original (hardware) physical machine.										
3	Performance	C	The VMM must have complete control of the system resources.										
Option A:	1- B, 2- C, 3- A												
Option B:	1- C, 2- B, 3- A												
Option C:	1- B, 2- A, 3- C												
Option D:	1- A, 2- C, 3- B												
Q9.	When the cost of infrastructure and management is _____, cloud computing is considered as a good option.												
Option A:	High												
Option B:	Moderate												
Option C:	Low												
Option D:	Minimal												
Q10.	Which of the following is not an example of XaaS.												
Option A:	Collaboration as a Service												
Option B:	Compliance as a Service												
Option C:	Compliant as a Service												
Option D:	Communication as a Service												
Q11.	CaaS stands for _____ as a service in cloud computing.												
Option A:	Community												
Option B:	Computer												
Option C:	Custom												

Option D:	Communication
Q12.	Identify the disadvantage of SaaS.
Option A:	Stay focused on business processes
Option B:	Create a consistent application environment for all users
Option C:	Initial time needed for licensing and agreements
Option D:	Reduced piracy of your software
Q13.	The Glance component provides which of the following services?
Option A:	Network monitoring
Option B:	Image management
Option C:	Disaster recovery
Option D:	Container orchestration
Q14.	Which OpenStack component provides a database as a service?
Option A:	Trove
Option B:	Manila
Option C:	Storlets
Option D:	Kuryr
Q15.	Which of the following is OpenStack's object storage system?
Option A:	Swift
Option B:	Cinder
Option C:	Ceilometer
Option D:	Nova
Q16.	CDMI stands for
Option A:	Cloud Data Management Instance

Option B:	Cloud Data Management Interface
Option C:	Cloud Data Monitoring Interface
Option D:	Cloud Data Messaging Interface
Q17.	If the GFS Master goes down, which of the following files can be used to create a Shadow Master?
Option A:	Backup file
Option B:	Failure file
Option C:	Recovery file
Option D:	Operations Log file
Q18.	Which three OpenStack components does Nova need to function?
Option A:	Neutron, Horizon and Glance
Option B:	Glance, Keystone and Horizon
Option C:	Keystone, Glance and Neutron
Option D:	Cinder, Swift and Kolla
Q19.	CSG is responsible for managing all the I/O between
Option A:	Computers and Servers on Cloud
Option B:	Clients and Servers on Cloud
Option C:	Clients and Cloud storage providers
Option D:	Clients and Storage gateways
Q20.	Which of the following statements describes network ACLs in AWS?
Option A:	Responses to allowed inbound traffic are allowed to flow outbound regardless of outbound rules, and vice versa (are stateless)
Option B:	Using network ACLs, you can deny access from a specific IP range
Option C:	NACLs are associated with a single Availability Zone (associated with Subnet)

Option D:	Using ACLs, you can only block outgoing traffic
Q21.	What is the minimum size subnet that you can have in an Amazon VPC?
Option A:	/24
Option B:	/26
Option C:	/28
Option D:	/30
Q22.	A stock broker firm uploads all their data on the server on a daily basis. And they need a robust storage solution to protect this important data from accidental or malicious deletion/modification. Which action will protect against unintended user actions?
Option A:	Store data in an EBS volume and create snapshots once a week.
Option B:	Store data in an S3 bucket and enable versioning.
Option C:	Store data in two S3 buckets in different AWS regions.
Option D:	Store data on EC2 instance storage
Q23.	Amazon Elastic Load Balancing supports which of the following types of load balancers? i. Cross-region ii. Internet-facing iii. Interim iv. Itinerant v. Internal vi. Hypertext Transfer Protocol Secure (HTTPS) using Secure Sockets Layer (SSL) Select appropriate answer from the following options
Option A:	ii and vi only
Option B:	ii, v and vi

Option C:	iii and vi only
Option D:	i, iv and vi
Q24.	Swift and S3 services are used for
Option A:	Object level storage
Option B:	Service level storage
Option C:	Block level storage
Option D:	Daemon level storage
Q25.	The Trove service in Openstack is analogous to _____service in AWS
Option A:	EC2
Option B:	ELB
Option C:	RDS
Option D:	EBS

Program: BE Instrumentation Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester VI

Course Code: ISC603 and Course Name: Electrical Machines and Drives

Time: 1hour

Max. Marks: 50

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

Q1.	No-load speed of which of the following motor is highest?
Option A:	Differentially compound motor
Option B:	Cumulative compound motor
Option C:	Series Motor
Option D:	Shunt Motor
Q2.	Which of the following is used to determine the direction of rotation of DC motor?
Option A:	Coloumb's law
Option B:	Lenz's law
Option C:	Fleming's Right Hand Rule
Option D:	Fleming's Left Hand Rule
Q3.	A three-point starter is suitable for
Option A:	Shunt Motor
Option B:	Series Motor
Option C:	Shunt & Compound Motor
Option D:	Shunt & Compound Motor
Q4.	If the back EMF of DC motor vanishes then
Option A:	The motor continues to run
Option B:	Motor will stop
Option C:	Armature will burn
Option D:	The motor continues to run in slow speed
Q5.	Which of the following application requires high starting torque
Option A:	Elevator
Option B:	Air blower
Option C:	Centrifugal Pump

Option D:	Locomotive
Q6.	The frame of an induction motor is usually made of
Option A:	Silicon steel
Option B:	Cast iron
Option C:	Aluminum
Option D:	Bronze
Q7.	A 3-phase 440 V, 50 Hz induction motor has 4% slip. The frequency of rotor current will be
Option A:	50 Hz
Option B:	25 Hz
Option C:	5 Hz
Option D:	2 Hz
Q8.	A 50 Hz, 3-phase induction motor has a full load speed of 1440 r.p.m. The number of poles in the motor is
Option A:	2 pole
Option B:	4 pole
Option C:	6 pole
Option D:	8 pole
Q9.	As compared to DOL starting method the star delta starting method should have
Option A:	High torque
Option B:	Low starting current
Option C:	High starting current
Option D:	Smooth acceleration
Q10.	If any two phases for an induction motor are interchanged
Option A:	The motor will run in the reverse direction
Option B:	The motor will continue to run in the same direction
Option C:	The motor will stop
Option D:	The motor will Burn
Q11.	In a split phase motor, the running winding should have
Option A:	High resistance and low inductance
Option B:	High resistance and High inductance
Option C:	Low resistance and high inductance
Option D:	Low resistance and Low inductance

Q12.	In split phase motor, the main winding is made up of
Option A:	Thick wire placed at the top of the slots
Option B:	Thick wire placed at the bottom of the slots
Option C:	Thin wire placed at the top of the slots
Option D:	Thin wire placed at the bottom of the slots
Q13.	If starting winding of a single-phase induction motor is left in the circuit, it will
Option A:	Damage the starting winding
Option B:	Run Faster
Option C:	Run slower
Option D:	Spark at light load
Q14.	In a shaded pole single-phase motor, the revolving field is produced by the use of
Option A:	Shading coils
Option B:	Capacitor
Option C:	Inductor
Option D:	Resistor
Q15.	Which semiconductor power device out of the following, is not a current triggering device
Option A:	Thyristor
Option B:	Triac
Option C:	G.T.O
Option D:	MOSFET
Q16.	TRIAC is a semiconductor power electronic device which contains
Option A:	Two SCR's connected in reverse parallel
Option B:	Two SCR's connected in parallel
Option C:	Two SCR's connected in series
Option D:	Two BJT's connected in series
Q17.	The inverter can be classified as
Option A:	Voltage Source Inverter
Option B:	Current Source Inverter
Option C:	Both 1 and 2
Option D:	Power Inverter
Q18.	In a three-phase half-wave rectifier, each diode conducts for a duration of

Option A:	180°
Option B:	120°
Option C:	90°
Option D:	60°
Q19.	The thyristor is turned -off when the anode current falls below
Option A:	Forward current
Option B:	Latching current
Option C:	Holding current
Option D:	Breakover current
Q20.	In a thyristor circuit, the angle of conduction is changed by changing
Option A:	Anode voltage
Option B:	Gate current
Option C:	Forward current
Option D:	Anode current
Q21.	UJT when used for triggering an SCR, has the waveform
Option A:	Sine wave
Option B:	Square Wave
Option C:	Trapezoidal
Option D:	Saw tooth wave
Q22.	Inverter converts
Option A:	DC to AC
Option B:	AC to DC
Option C:	DC to DC
Option D:	AC to AC
Q23.	A SCR is a _____ switch
Option A:	One directional
Option B:	Two directional
Option C:	Three directional
Option D:	Four directional
Q24.	For an application which requires smooth and precise speed control over the wide range, the motor is preferred is
Option A:	Squirrel cage Induction Motor
Option B:	Synchronous Motor
Option C:	DC motor
Option D:	Wound Rotor Induction Motor

Q25.	Stator voltage control for the speed control of induction motor is suitable for
Option A:	Fan and Pump Drive
Option B:	Drive of a crane
Option C:	Running as the generator
Option D:	Constant Load drive