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FUNDAMENTALS OF ELECTRICAL ENGINEERING(BEE-101/201) (QUIZ) (SAMPLE FORMAT) CO -1 (DC CIRCUIT ANALYSIS)

1. Calculate the current A.



b) 10Ac) 15A

d) 20A

2. Calculate the current across the 20 ohm resistor.



a) 20A

b) 1A

c) 0.67A

- d) 0.33A
- 3. What is the value of current if a 50C charge flows in a conductor over a period of 5 seconds?
  - a) 5A
  - b) 10A
  - c) 15A
  - d) 20A
- 4. KCL deals with the conservation of?
  - a) Momentum
  - b) Mass
  - c) Potential Energy
  - d) Charge
- 5. KCL is applied at \_\_\_\_\_
  - a) Loop
  - b) Node
  - c) Both loop and node
  - d) Neither loop nor node
- 6. KCL can be applied for
  - a) Planar networks
    - b) Non-planar networks
    - c) Both planar and non-planar
  - d) Neither planar nor non-planar
- KVL deals with the conservation of?
   a) Mass
  - b) Momentum



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- c) Charge
- d) Energy
- 8. Find the value of the currents I1 and I2.



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- c) 8 ohm
- d) 7 ohm
- 14. Nodal analysis is generally used to determine\_\_\_\_\_
  - a) Voltage
  - b) Current
  - c) Resistance
  - d) Power
- 15. Find the value of the currents I1, I2 and I3 flowing clockwise in the first, second and third mesh respectively.



- a) 1.54A, -0.189A, -1.195A
- b) 2.34A, -3.53A, -2.23A
- c) 4.33A, 0.55A, 6.02A
- d) -1.18A, -1.17A, -1.16A
- 16. Calculate the mesh currents I1 and I2 flowing in the first and second meshes respectively.





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19. Find the value of V1 and V2.



- a) 87.23V, 29.23V
- b) 23.32V, 46.45V
- c) 64.28V, 16.42V
- d) 56.32V, 78, 87V
- 20. If there are 10 nodes in a circuit, how many equations do we get?
  - a) 10
  - b) 9
  - c) 8
  - d) 7

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#### FUNDAMENTALS OF ELECTRICAL ENGINEERING(BEE-101/201) **QUIZ( SAMPLE FORMAT) CO-2 (AC CIRCUIT ANALYSIS)**

- 1. Calculate Which, among the following, is the correct expression for alternating emf generated?
  - a)  $e=2Blvsin(\theta)$
  - b)  $e=2B^2 lvsin(\theta)$
  - c)  $e=Blvsin(\theta)$
  - d)  $e=4Blvsin(\theta)$
- 2. Calculate the maximum emf when the velocity is 10m/s, the length is 3m and the magnetic field density is 5T. a) 150V
  - b) 100V
  - c) 300V
  - d) 0V

3. The number of cycles that occur in one second is termed as \_\_\_\_\_

- a) Waveform
- b) Frequency
- c) Amplitude
- d) Period
- 4. If the peak to peak voltage is 10V, calculate the peak voltage.
  - a) 10V
  - b) 2V
  - c) 4V
  - d) 5V
- 5. Which is the correct formula for frequency in an ac generator?
  - a) f=p\*n
  - b) f=p/n
  - c) f=n/p
  - d)  $f=n^2p$

6. In a sinusoidal wave, average current is always \_\_\_\_\_ rms current.

- a) Greater than
- b) Less than
- c) Equal to
- d) Not related
- 7. Average value of current over a half cycle is?
  - a) 0.67Im
  - b) 0.33Im
  - c) 6.7Im
  - d) 3.3Im

8. If the maximum value of the current is  $5\sqrt{2}$  A, what will be the value of the average current?

- a)  $10/\pi A$
- b) 5/π A
- c) 15/π A
- d) 25/π A
- 9. If a voltage of 2+5j and another voltage of 3+ 6j flows through two different resistors, connected in series, in a circuit, find the total voltage in the circuit.

a) 2+5j V

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- b) 3+6j V
- c) 5+11j V
- d) 5+10j V
- 10. Inductor does not allow sudden changes in?
  - a) Voltage
  - b) Current
  - c) Resistance
  - d) Inductance
- **11.** A resistance of 7 ohm is connected in series with an inductance of 31.8mH. The circuit is connected to a 100V 50Hz sinusoidal supply. Calculate the current in the circuit.
  - a) 2.2A
  - b) 4.2A
  - c) 6.2A
  - d) 8.2A
- **12.** A resistance of 7 ohm is connected in series with an inductance of 31.8mH. The circuit is connected to a x V 50Hz sinusoidal supply. The current in the circuit is 8.2A. Calculate the value of x.
  - a) 10V
  - b) 50V
  - c) 100V
  - d) 120V
- 13. What is sind from impedance triangle?
  - a)  $X_L/R$
  - b)  $X_L/Z$
  - c) R/Z
  - d) Z/R
- 14. What is the resonance frequency of ac circuit?
  - a) 1/√LC
  - b) √(L/C)
  - c) √LC
  - d) LC
- 15. What is the resonance condition?
  - a) When  $X_L > X_C$
  - b) When  $X_L < X_C$
  - c) When  $X_L = X_C$
  - d) When X<sub>C</sub>=infinity

16. The combination of resistance and reactance known as

- a) Susceptance
  - b) Impedance
  - c) Conductance
  - d) Admittance

17. What is imaginary part of the impedance of RLC circuit?

- a) Resistance
- b) Conductance
- c) Admittance
- d) Reactance

18. In an RLC circuit, which of the following is always used as a vector reference?

a) Voltage



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- b) Resistance
- c) Impedance
- d) Current
- 19. What happens to the quality factor when resonant frequency increases?
  - a) Increases
  - b) Decreases
  - c) Remains the same
  - d) Becomes zero

#### **20.** Find the value of $I_R$ if I=10A and $I_L$ =8A.



a) 5A

- b) 18A
- c) 12A
- d) 2A



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# FUNDAMENTALS OF ELECTRICAL ENGINEERING(BEE-101/201) QUIZ( SAMPLE FORMAT) CO -3 (MAGNETIC CIRCUIT & TRANSFORMER)

1.	Dielectric mineral oil is used in
	a) Small transformers
	b) Medium transformers
	c) Large transformers
	d) In all transformers
2.	The purpose of the transformer core is to provide
	a) High reluctance path
	b) Low reluctance path
	c) High inductive path
	d) High capacitive path
3.	Transformer core is designed to reduce
5.	a) Hysteresis loss
	b) Eddy current loss
	c) Hysteresis loss and Eddy current loss
	d) Cannot be determined
Δ	Transformer ratings are given in
ч.	a) kW
	b) kVAR
	c) HP
	d) kVA
5	Function of transformer is to
5.	a) Convert AC to DC
	b) Convert DC to AC
	c) Step down or up the DC voltages and currents
	d) Step down or up the AC voltages and currents
6	What is the no-load current drawn by transformer?
0.	x = 0.2 to 0.5 per cent
	a) $0.2$ to $0.5$ per cent
	a) 12 to 15 per cent
	d) 20 to 20 per cent
7	Maximum value of flux established in a transformer on load is equal to
7.	(1.1) = 1/(4.44 + 1)
	a) $D1/(4.44^{-1} N_{1})$ b) $D1/(4.44*f*N_{1})$
	D) E1/ $(4.44 \cdot 1^{-1}N_2)$
	d) Connet define
0	d) Calmot define
٥.	a) no losses and magnetic leakage
	a) no losses and magnetic reakage
	a) a common core for its primary and secondary windings
	d) core of stainless steel and winding of pure copper metal
0	An ideal transformer will have maximum efficiency at a load such that
9.	a) conner loss = iron loss
	h) copper loss < iron loss
	c) copper loss $\geq$ iron loss
	d) cannot be determined
10	Which of the following is the wrong expression?
10	a) i. $N_1 = i_1 N_2$
	h) $i_1 v_1 = i_2 v_2$
	c) $i_1 N_1 = i_2 N_1$
	d) $v_0 N_1 = v_1 N_2$
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- 11. A transformer transforms
  - a) voltage
  - b) current
  - c) power
  - d) frequency
- 12. If R is the resistance of secondary winding of an electrical transformer and K is the transformation ratio then the equivalent secondary resistance referred to primary will be \_\_\_\_\_
  - a) R/VK
  - b)  $R/K^2$
  - c)  $R^2/K^2$
  - d)  $R^2/K$
- 13. Which of the following equation correctly represents the exact phasor diagram of transformer?
  - a)  $V_1 = E_1 + I_1 R_1 + j I_1 X_1$
  - b)  $V_1 = E_1 + I_1 R_1 + j I_2 X_2$
  - c)  $V_2 = E_2 + I_1 R_1 + j I_1 X_1$
  - d)  $V_1 = E_1 I_1 R_1 + j I_1 X_1$
- 14. The full-load copper loss of a transformer is 1600 W. At half-load, the copper loss will be
  - a) 6400 W
  - b) 1600 W
  - c) 800 W
  - d) 400 W
- 15. Silicon steel used in laminations, because it reduces
  - a) Hysteresis loss
  - b) Eddy current losses
  - c) Copper losses
  - d) Cannot be determined
- 16. A 500 kVA transformer is having efficiency of 95% at full load and also at 60% of full load; both at unity power factor. Then P<sub>i</sub> is
  - a) 16.45 kW
  - b) 9.87 kW
  - c) 14.57 kW
  - d) Can't be calculated
- 17. Voltage regulation of transformer is given by \_\_\_\_\_
  - a)  $E_2 V_2 / V_2$
  - b)  $E_2 V_2 / E_2$
  - c)  $V_2 E_2 / E_2$
  - d)  $V_2 E_2 / V_2$
- 18. Core flux in the transformer is \_\_\_\_\_
  - a) sinusoidal
  - b) flat-topped
  - c) square wave
  - d) triangular
- 19. What is the correct formula of efficiency of a device?
  - a) Input /output
  - b) Output/losses
  - c) 1- (losses/ (output + losses))
  - d) Cannot be determined

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### FUNDAMENTALS OF ELECTRICAL ENGINEERING(BEE-101/201) **OUIZ( SAMPLE FORMAT)**

#### **CO-4 (ELECTRICAL MACHINES)**

- 1. What are the materials used for brushes in dc machines?
  - a) Iron
  - b) Carbon
  - c) Aluminum
  - d) Steel
- 2. The armature of DC motor is laminated to
  - a) To reduce mass
  - b) To reduce hysteresis loss
  - c) To reduce eddy current loss
  - d) To reduce inductance
- 3. If the speed of rotation for a four pole, 220V dc machine is 1 m/s, flux density as 2T having length of bore as 0.1m and radius of 0.5m.
  - The emf induced under pole faces will be
  - a) 0.2 V
  - b) 0.1 V
  - c) 0.2\*pi V
  - d) 220 V
- 4. For a four pole, 200 V dc shunt generator having armature resistance of 1 ohms. The current flowing in the armature is 10 A. What is the back emf generated if the terminal voltage of 220 V supply is fed?
  - a) 230 Volts
  - b) 210 Volts
  - c) 190 Volts
  - d) 200 Volts
- 5. What is the principle of torque production in a dc machine?
  - a) Lorentz's law
  - b) Lenz's law
  - c) Faraday's law
  - d) Self inductance
- 6. Which of the following are applied with differential compound motor?
  - a) Hoist
  - b) Cranes
  - c) Drilling machines
  - d) None of the mentioned
- 7. For a dc shunt motor of 5 kW, running at 1000 rpm, the induced torque will be
  - a) 47.76 N
  - b) 57.76 N
  - c) 35.76 N
  - d) 37.76 N
- 8. The direction of rmf when a three phase supply is given to stator of three phase induction motor is
  - a) zero
  - b) Ns
  - c) 2Ns
  - d)-Ns
- 9. Slip is defined as (Ns as the synchronous speed and Nr is the rotor speed)
  - a) Ns-Nr/Ns
  - b) Ns-Nr/Nr
  - c) Nr-Ns/Ns
  - d) Ns-Nr
- 10. For a 4 pole three phase induction motor having synchronous speed of 1500 rpm is operating at 1450rpm. The frequency of the induced emf in rotor is
  - a) 100 Hz







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- b) 50 Hz
- c) 150 Hz
- d) 0 Hz
- 11. A three phase, 50 Hz induction motor has a full load speed of 1440 rpm. The full load slip will be
  - a) 4%
  - b) 5%
  - c) 2.4%
  - d) 3%
- 12. A three phase, 50 Hz induction motor has a full load speed of 1440 rpm. Speed of the stator filed with respect to stator structure is
  - a) 157 rad/s
  - b) 150 rad/s
  - c) 6.28 rad/s
  - d) 145 rad/s
- **13.** For a 4 pole three phase induction motor having synchronous speed of 1500 rpm is operating at 1450rpm. The frequency of the induced emf in rotor is
  - a) 100 Hz
  - b) 50 Hz
  - c) 150 Hz
  - d) 0 Hz
- 14. The rotor of a three phase induction motor can never attain synchronous speed.
  - a) True
  - b) False
- 15. The velocity of the dc machine at the final state is
  - a) E/Bl
  - b) Bl/E
  - c) EBl
  - d) None of the mentioned
- 16. If the torque induced is zero in the dc machine, it can be said that
  - a) current is zero
  - b) flux can be zero
  - c) current or flux=0
  - d) any of the mentioned
- 17. Centrifugal pumps, fans-blowers use
  - a) shunt as well as induction motor
  - b) only shunt motors
  - c) only induction motor
  - d) none of the mentioned
- 18. In a three phase slip ring induction motor, brushes are connected to
  - a) external star connected resistors
  - b) dc supply
  - c) 3-phase ac supply
  - d) any of the mentioned
- 19. The voltage actually used to set up the working flux in the three phase induction motor is
  - a) equal to applied voltage
  - b) less than applied voltage
  - c) more than applied voltage
  - d) equal to rotor induced emf.
- 20. If the three phase supply is fed to the rotor and it is running at its normal operating conditions. There synchronous speed can be defined as speed at which
  - a) stator magnetic field rotates
  - b) rotor magnetic field rotates
  - c) rotor rotates
  - d) flux is set up in the rotor

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#### FUNDAMENTALS OF ELECTRICAL ENGINEERING(BEE-101/201) QUIZ( SAMPLE FORMAT) CO-5 (ELECTRICAL INSTALLATIONS)

- 1. The material used for fuse must have
  - (a) low melting point and high specific resistance
  - (b) low melting point and low specific resistance
  - (c) high melting point and low specific resistance
  - (d) low melting point and any specific resistance
- 2. The full form of MCB is
- (a) Main Circuit Breaker
- (b) Miniature Circuit Breaker
- (c) Major Circuit Breaker
- (d) Mask Circuit Breaker
- 3. The full form of MCCB is
- (a) Main Current Circuit Breaker
- (b) Major Current Circuit Breaker
- (c) Moulded Case Circuit Breaker
- (d) Main Case Circuit Breaker
- 4. The full form of ELCB is
- (a) Earth Line Circuit Breaker
- (b) Earth Line Current Breaker
- (c) Earth Leakage Current Breaker
- (d) Earth Leakage Circuit Breaker
- 5. The insulating material for a cable should have
- (a) low cost
- (b) high dielectric strength
- (c) high mechanical strength
- (d) all of above
- 6. Which of the following is the electrolyte used in a lead-acid battery?
  - (a) Nitric acid
  - (b) Sulphuric acid
  - (c) Lead-acid
  - (d) Hydrochloric acid
- 7. Which of the following energy is converted to electricity by the battery?
  - (a) Mechanical energy
  - (b) Chemical energy
  - (c) Thermal energy
  - (d) Electrical energy
- 8. Which of the following is the material used for separator?
  - (a) Nickel
  - (b) Cast iron
  - (c) Ebonite
  - (d) Bronze
- 9. What is the amount of water and acid present in the electrolyte after the full discharge of the
  - battery?
  - (a) 90% of water and 10% of acid



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- (b) 85% of water and 15% of acid
- (c) 70% of water and 30% of acid
- (d) 75% of water and 25% of acid
- 10.Materials used in plate earthing are
  - (a) Wood coal
  - (b) Salt, earthing plate
  - (c) (a) and (b) both
  - (d) None of the above
- 11. The purpose of earthing electric appliances is
  - (a)To provide safety against shock
  - (b)To ensure that the appliance saves current
  - (c)To ensure that the appliance gets full voltage
  - (d)None of these
- 12. Inside the earth pit, the earthing electrode should be placed
  - (a)Vertical
  - (b)Horizontal
  - (c)Inclined at 45°
  - (d)Inclined at any angle other than 45°
- 13. Normally the human body resistance in the totally wet and the dry condition is \_\_\_\_\_\_ respectively.
  - (a)1 k $\Omega$  and 1 M $\Omega$
  - (b)0.1  $\Omega$  and 10 k $\Omega$
  - (c)100  $\Omega$  and 1 k $\Omega$
  - (d)100  $\Omega$  and 10 k  $\Omega$
- 14. What type of earthing is used by transmission lines?
  - (a)Plate earthing
  - (b)Rod earthing
  - (c)Strip earthing
  - (d)Both plate and strip earthing
- 15. Which type of earthing is also called as 'fire earthing'?
  - (i) plate earthing
  - (ii) rod earthing
  - (iii) strip earthing
  - (a) only i
  - (b) only ii
  - (c) only iii
  - (d) i, ii and iii

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#### SAMPLE FORMAT

#### QUIZ-1 ( CO1)

1) Which of the following is not a characteristic of a relational database model?

A. Table

B. Tree like structure

C. Complex logical relationship

D. Records

2) Field is otherwise called as..... of the record

A. data item

B. data type

C. value

D. variable

3) A table can have only one

A. Secondary key

B. Alternate key

C. Unique key

D. Primary key

4) A field can be called as ..... in relation context.

A. random file

B. direct file

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C. attribute

D. tuple

2

5) In the relational modes, cardinality is termed as

A. Number of tuples

- B. Number of attributes
- C. Number of tables
- D. Number of constraints
- 6) The..... is used for creating and destroying table, indexes and other forms of structures.
- A. data manipulation language
- B. data control language
- C. transaction control language
- D. data definition language
- 7) The view of total database content is
- A. Conceptual view
- B. Internal view
- C. External view
- D. Physical view
- 8) The.....refers to the way data is organized in and accessible from DBMS.
- A. database hierarchy
- B. data organization
- C. data sharing
- D. data model



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9) Architecture of the database can be viewed as

A. two levels

J

- B. four levels
- C. three levels

D. one level

- 10).....introduced the relational database rules.
- A. Atul kahate
- B. James Gossling
- C. EF Codd
- D. Dennies Rithchie



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SAMPLE FORMAT

### QUIZ-2 (CO2)

- 1) In a relational model, relations are termed as
- A. Tuples
- **B.** Attributes
- C. Tables
- D. Rows

2) When the values in one or more attributes being used as a foreign key must exist in another set of one or more attributes in another table, we have created a(n) ......

A. transitive dependency

- B. insertion anomaly
- C. referential integrity constraint
- D. normal form

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3) In the architecture of a database system external level is the

A. physical level

. . .

- B. logical level
- C. conceptual level
- D. view level
- 4) A functional dependency is a relationship between or among ......
- A. tables
- B. rows
- C. relations
- D. attributes
- 5) Related fields in a database are grouped to form a
- A. data file
- B. data record
- C. menu
- D. bank
- 6) is, a table have more than one set of attributes that could be chosen as the key
- A. foreign key
- B. integrity key
- C. relationship
- D. candidate key



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7) The database environment has all of the following components except.

A. users

1

B. separate files

C. database

D. database administrator

8) The operation of eliminating columns in a table done by ...... operation.

A. Restrict

B. Project

C. Union

D. Divide

9) The way a particular application views the data from the database that the application uses is a

- A. module
- B. relational model
- C. schema
- D. sub schema

10) is a condition specified on a database schema and restricts the data that can be stored in an instance of the database.

- A. Key Constraint
- B. Check Constraint
- C. Foreign key constraint
- D. integrity constraint



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#### SAMPLE FORMAT

#### QUIZ-3 (CO3)

1) The language that requires a user to specify the data to be retrieved without specifying exactly how to get it is

- A. Procedural DML
- B. Non-Procedural DML
- C. Procedural DDL
- D. Non-Procedural DDL
- 2) Which two files are used during operation of the DBMS?
- A. Query languages and utilities
- B. DML and query language
- C. Data dictionary and transaction log
- D. Data dictionary and query language
- 3) The database schema is written in
- A. HLL
- B. DML
- C. DDL
- D. DCL

4) The way a particular application views the data from the database that the application uses is a

- A. module
- B. relational model

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C. schema

D. sub schema

Head Head Head Head 0

Director R.D. Engineering College Duhai, Ghaziabad 5) The relational model feature is that there

A. is no need for primary key data

B. is much more data independence than some other database models

C. are explicit relationships among records.

D. are tables with many dimensions

6) Which one of the following statements is false?

A. The data dictionary is normally maintained by the database administrator

B. Data elements in the database can be modified by changing the data dictionary.

C. The data dictionary contains the name and description of each data element.

D. The data dictionary is a tool used exclusively by the database administrator.

7) Which of the following are the properties of entities?

A. Groups

10

B. Table

C. Attributes

D. Switchboards

8) Which database level is closest to the users?

A. External

- B. Internal
- C. Physical

D. Conceptual



9) Which are the two ways in which entities can participate in a relationship?

A. Passive and active

B. Total and partial

C. Simple and Complex

D. All of the above

10)data type can store unstructured data

A. RAW

24 m.,

B. CHAR

C. NUMERIC

D. VARCHAR



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#### SAMPLE FORMAT

**QUIZ-4 (CO4)** 

1. In the \_\_\_\_\_\_ normal form, a composite attribute is converted to individual attributes.

a) First

- b) Second
- c) Third
- d) Fourth

2. A table on the many side of a one to many or many to many relationship must:

a) Be in Second Normal Form (2NF)

b) Be in Third Normal Form (3NF)

c) Have a single attribute key

d) Have a composite key

3. Tables in second normal form (2NF):

a) Eliminate all hidden dependencies

b) Eliminate the possibility of a insertion anomalies

c) Have a composite key

d) Have all non key fields depend on the whole primary key

4. Which-one of the following statements about normal forms is FALSE?

a) BCNF is stricter than 3 NF

b) Lossless, dependency -preserving decomposition into 3 NF is always possible

c) Loss less, dependency - preserving decomposition into BCNF is always possible

d) Any relation with two attributes is BCNF

5. Functional Dependencies are the types of constraints that are based on\_\_\_\_

a) Key

b) Key revisited

c) Superset key

d) None of the mentioned

6. Which is a bottom-up approach to database design that design by examining the relationship between attributes:

a) Functional dependency

b) Database modeling

c) Normalization

d) Decomposition

7. Which forms simplifies and ensures that there are minimal data aggregates and repetitive groups:

a) 1NF

b) 2NF

c) 3NF

d) All of the mentioned

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8. Which forms has a relation that possesses data about an individual entity:

ì .,

b) 3NF

c) 4NF

d) 5NF

9. Which forms are based on the concept of functional dependency:

a) 1NF

b) 2NF c) 3NF

d) 4NF

10. Empdt1(empcode, name, street, city, state, pincode).

For any pincode, there is only one city and state. Also, for given street, city and state, there is just one pincode. In normalization terms, empdt1 is a relation in a) 1 NF only

- b) 2 NF and hence also in 1 NF
- c) 3NF and hence also in 2NF and 1NF

d) BCNF and hence also in 3NF, 2NF and 1NF

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R.D. Engineering College Duhai, Ghaziabad

AICTE ID: 1-3548321

College Code: 231

R. D. ENGINEERING COLLEGE

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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### SAMPLE FORMAT

#### QUIZ-5 ( CO5)

1. The normal form which satisfies multivalued dependencies and which is in BCNF is

- a) 4 NF
- b) 3 NF
- c) 2 NF
- d) All of the mentioned

2. Which of the following is a tuple-generating dependencies?

- a) Functional dependency
- b) Equality-generating dependencies
- c) Multivalued dependencies

d) Non-functional dependency

3. The main task carried out in the \_\_\_\_\_\_ is to remove repeating attributes to separate tables.

- a) First Normal Form
- b) Second Normal Form
- c) Third Normal Form
- d) Fourth Normal Form

4. Which of the normal form is based on multivalued dependencies?

- a) First
- b) Second
- c) Third
- d) Fourth

5. Which forms has a relation that possesses data about an individual entity?

- a) 2NF
- b) 3NF
- c) 4NF
- d) 5NF

6. If a multivalued dependency holds and is not implied by the corresponding functional dependency, it usually arises from one of the following sources.

- a) A many-to-many relationship set
- b) A multivalued attribute of an entity set
- c) A one-to-many relationship set
- d) Both A many-to-many relationship set and A multivalued attribute of an entity set

7. Which of the following has each related entity set has its own schema and there is an additional schema for the relationship set?

- a) A many-to-many relationship set
- b) A multivalued attribute of an entity set
- c) A one-to-many relationshin set

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# d) None of the mentioned

8. In which of the following, a separate schema is created consisting of that attribute and the primary key of the entity set.

a) A many-to-many relationship set

b) A multivalued attribute of an entity set

- c) A one-to-many relationship set
- d) None of the mentioned
- 9. Fifth Normal form is concerned with
- a) Functional dependency
- b) Multivalued dependency
- c) Join dependency
- d) Domain-key
- 10. In 2NF
- a) No functional dependencies (FDs) exist
- b) No multivalued dependencies (MVDs) exist
- c) No partial FDs exist
- d) No partial MVDs exist

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### **Quiz Questions with CO- Statement**

MCA Department	Year: 2022-23
Quiz — I	Semester: Even
(Based on CO 1)	

Name of the Faculty : Ms.Swati Sharma

Subject:DBMS

Subject Code: KCA 204

Branch/Sem/Sec: MCA/II<sup>nd</sup> Sem

1. What is the full form of DBMS?

a) Data of Binary Management System

b) Database Management System

c) Database Management Service

d) Data Backup Management System

2. What is a database?

a) Organized collection of information that cannot be accessed, updated, and managed

b) Collection of data or information without organizing

c) Organized collection of data or information that can be accessed, updated, and managed

d) Organized collection of data that cannot be updated

3. What is DBMS?

- a) DBMS is a collection of queries
- b) DBMS is a high-level language
- c) DBMS is a programming language

d) DBMS stores, modifies and retrieves data

4. Who created the first DBMS?

- a) Edgar Frank Codd
- b) Charles Bachman

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- c) Charles Babbage
- d) Sharon B. Codd
- 5. Which type of data can be stored in the database?
- a) Image oriented data
- b) Text, files containing data
- c) Data in the form of audio or video
- d) All of the above

6. In which of the following formats data is stored in the database management system?

- a) Image
- b) Text
- c) Table
- d) Graph

7. Which of the following is not a type of database?

- a) Hierarchical
- b) Network
- c) Distributed
- d) Decentralized
- 8. Which of the following is not an example of DBMS?
- a) MySQL
- b) Microsoft Acess
- c) IBM DB2
- d) Google
- 9. Which of the following is not a feature of DBMS?
- a) Minimum Duplication and Redundancy of Data
- b) High Level of Security
- c) Single-user Access only
- d) Support ACID Property

10. Which of the following is a feature of the database?

- a) No-backup for the data stored
- b) User interface provided
- c) Lack of Authentication
- d) Store data in multiple locations

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#### **Quiz Questions with CO- Statement**

MCA Department	<b>Year:</b> 2022-23
Quiz — II	Semester: Even
(Based on CO 2)	Semester : Even

Name of the Faculty : Ms.Swati Sharma

Subject:DBMS

Subject Code: KCA 204

#### Branch/Sem/Sec: MCA/II<sup>nd</sup> Sem

1. Choose the correct statement regarding superkeys

a) A superkey is an attribute or a group of multiple attributes that can uniquely identify a tuple

b) A superkey is a tuple or a set of multiple tuples that can uniquely identify an attribute

c) Every superkey is a candidate key

d) A superkey is an attribute or a set of attributes that distinguish the relation from other relations

2. What is an Instance of a Database?

a) The logical design of the database system

b) The entire set of attributes of the Database put together in a single relation

c) The state of the database system at any given point of time

d) The initial values inserted into the Database immediately after its creation

3. What is a foreign key?

a) A foreign key is a primary key of a relation which is an attribute in another relation

b) A foreign key is a superkey of a relation which is an attribute in more than one other relations

c) A foreign key is an attribute of a relation that is a primary key of another relation

d) A foreign key is the primary key of a relation that does not occur anywhere else in the schema

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- 4. An attribute is a \_\_\_\_\_ in a relation.
- a) Row
- b) Column
- c) Value
- d) Tuple

5. What is the method of specifying a primary key in a schema description?

- a) By writing it in bold letters
- b) By underlining it using a dashed line
- c) By writing it in capital letters
- d) By underlining it using a bold line

6. Which of the following data types does the SQL standard not support?

- a) char(n)
- b) String(n)
- c) varchar(n)
- d) float(n)

7. Which command is used to create a new relation in SQL

- a) create table(, ...)
- b) create relation(, ...)
- c) new table(, ...)
- d) new relation(, ...)

8. Which of the following commands do we use to delete a relation (R) from a database?

- a) drop table R
- b) drop relation R
- c) delete table R
- d) delete from R
- 9. The on condition appears at the \_\_\_\_\_ of the join expression
- a) Beginning
- b) End
- c) Between
- d) The on condition is not related to join expression

10. The join operations that do not retain mismatched tuples are called as \_\_\_\_\_ operations

- a) outer join
- b) natural join
- c) full outer join
- d) inner join

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### **Quiz Questions with CO- Statement**

MCA Department	Year: 2022-23
Quiz — III	Semester: Even
(Based on CO 3)	

1. A table is in BCNF if it is in 3NF and if every determinant is a \_\_\_\_\_\_ key.

a) Dependent

b) Normal

c) Candidate

d) Both Normal and Candidate

2. The \_\_\_\_\_\_ normalization introduced by Chris Date, Hugh Darwen, and Nikos Lorentzos.

a) Third

b) Fourth

c) Fifth

d) Sixth

3. Every constraint on the table is a logical consequence of the table's

a) Fourth normal form

b) Fifth normal form

c) Domain/key normal form

d) None of the Mentioned

4. Anomalies are avoided by splitting the offending relation into multiple relations, is also known as

a) Accupressure

b) Decomposition

c) Precomposition

d) Both Decomposition and Precomposition

5. What are the desirable properties of a decomposition

a) Partition constraint



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- b) Dependency preservation
- c) Redundancy
- d) Security

6. The functional dependency can be tested easily on the materialized view, using the

- a) Primary key
- b) Null
- c) Unique
- d) Both Null and Unique

7. Which of the following is a tuple-generating dependencies?

- a) Functional dependency
- b) Equality-generating dependencies
- c) Multivalued dependencies
- d) Non-functional dependency

8. The main task carried out in the \_\_\_\_\_\_ is to remove repeating attributes to separate tables.

- a) First Normal Form
- b) Second Normal Form
- c) Third Normal Form
- d) Fourth Normal Form

9. If a multivalued dependency holds and is not implied by the corresponding functional dependency, it usually arises from one of the following sources.

- a) A many-to-many relationship set
- b) A multivalued attribute of an entity set
- c) A one-to-many relationship set
- d) Both A many-to-many relationship set and A multivalued attribute of an entity set
- 10. Fifth Normal form is concerned with
- a) Functional dependency
- b) Multivalued dependency
- c) Join dependency
- d) Domain-key

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# **Quiz Questions with CO- Statement**

	MCA Department	<b>Year:</b> 2022-23
	Quiz – IV (Based on CO 4)	
		Semester: Even

Name of the Faculty : Ms.Swati Sharma

Subject:DBMS

Subject Code: KCA 204

Branch/Sem/Sec: MCA/II<sup>nd</sup> Sem

1. A \_\_\_\_\_ consists of a sequence of query and/or update statements.

a) Transaction

- b) Commit
- c) Rollback
- d) Flashback

2. Consider the following action: TRANSACTION.....
Commit;
ROLLBACK;
What does Rollback do?
a) Undoes the transactions before commit
b) Clears all transactions

- c) Redoes the transactions before commit
- d) No action

3. In order to undo the work of transaction after last commit which one should be used?

- a) View
- b) Commit

c) Rollback





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d) Flashback

4. In case of any shut down during transaction before commit which of the following statement is done automatically?

- a) View
- b) Commit
- c) Rollback
- d) Flashback

5. In order to maintain the consistency during transactions, database provides

- a) Commit
- b) Atomic
- c) Flashback
- d) Retain

6. Transaction processing is associated with everything below except

- a) Conforming an action or triggering a response
- b) Producing detail summary or exception report
- c) Recording a business activity
- d) Maintaining a data

7. A transaction may not always complete its execution successfully. Such a transaction is termed

- a) Aborted
- b) Terminated
- c) Closed
- d) All of the mentioned

8. The name of the transaction file shall be provided by the operator and the file that contains the edited transactions ready for execution shall be called

- a) Batch. Exe
- b) Trans. Exe
- c) Opt. Exe
- d) Edit.Exe

9. \_\_\_\_\_ means that data used during the execution of a transaction cannot be used by a second transaction until the first one is completed.

a) Serializability

- b) Atomicity
- c) Isolation

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- d) Time stamping
- 10. Which of the following is not a state in transaction?
- a) Active
- b) Terminated
- c) Aborted
- d) Partially committed

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#### **Quiz Questions with CO- Statement**

MCA Department	<b>Year:</b> 2022-23
Quiz - V	Semester: Even
(Based on CO 5)	

Name of the Faculty : Ms.Swati Sharma

Subject:DBMS

Subject Code: KCA 204

#### Branch/Sem/Sec: MCA/II<sup>nd</sup> Sem

1. A management procedure called \_\_\_\_\_ control is required to control the process of concurrently performing operations on a database.

A. Database

B. Conspiracy

- C. Concurrency
- D. Relational

2. The concurrent execution of the database in a \_\_\_\_\_-user system refers to the fact that multiple users are able to access and use it at the same time.

- A. Single
- B. Two
- C. Three
- D. Multiple

3. When dealing with database transactions, there is often a need for multiple users to use a database to perform different operations. In this case, \_\_\_\_ of the database occurs.

A. Concurrent Connection

- B. Concurrent Reduction
- C. Concurrent Execution
- D. Concurrent Revolution

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4. During simultaneous execution, each operation should be performed interleaved with the others, ensuring that there is no interference with the other operations. This maintains a database \_\_\_\_.

A. Consistency

- B. Redundancy
- C. Concurrency
- D. None

5. What are the two main operations in the database transaction?

- A. READ
- B. WRITE
- C. Both A and B
- D. None of the above

6. How many concurrency problems are there?

- A. 4
- B. 5
- C. 6
- D. 7

7. Which of the following is a concurrency problem?

- A. Temporary Update Problem
- B. Incorrect Summary Problem
- C. Lost Update Problem
- D. All of the above

8. What is the Lost Update Problem also known as?

- A. W-W Conflict
- B. W-R Conflict
- C. R-R Conflict
- D. None

9. This occurs when more than one database transaction attempts to read or write the same database item simultaneously (i.e., concurrent execution), causing the values of the item to become incorrect, resulting in a/an database.

- A. Consistent
- B. Inconsistent
- C. Concurrent
- D. Not-concurrent

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- 10. What is the Dirty Read Problem also known as?
- A. W-W Conflict
- B. W-R Conflict
- C. R-R Conflict
- D. None

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