

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

MCA

FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)

(Objective Type)

Subject Code: AMCA0202

Subject: Database Management System

General Instructions:

All questions are compulsory.

Question No- 1 to 15 are objective type question carrying 2 marks each.

Question No- 16 to 35 are also objective type/Glossary based question carrying 2 marks each.

Max. Mks. : 70

Time : 70 Minutes

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty	Correct	Option1	Option2	Option3	Option4
1	Which one of the following commands is used for removing (or deleting) a relation forms the SQL database?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Drop	Delete	Drop	Remove	All of the above
2	The architecture of a database can be viewed as the _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Three-level	One level	Two-level	Three-level	Four level
3	The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Derived	Single valued	Multi valued	Composite	Derived
4	Which of the following relational algebra operations do not require the participating tables to be union-compatible?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Join	Union	Intersection	Difference	Join
5	How many Primary keys can have in a table?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Only 1	Only 1	Only 2	Depends on no of Columns	Depends on DBA
6	What is the difference between a PRIMARY KEY and a UNIQUE KEY?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	We can have only one primary key in a table while we can have multiple unique keys	Primary key can store null value, whereas a unique key cannot store null value.	We can have only one primary key in a table while we can have multiple unique keys	Primary key cannot be a date variable whereas unique key can be	None of these
7	5NF is designed to cope with :		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Join dependency	Transitive dependency	Join dependency	Multi valued dependency	None of these
8	Which of the following is based on Multi Valued Dependency		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Fourth	Third	Fourth	First	Second
9	Equivalence of functional dependencies exist between two sets E and F if _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	F covers E and E covers F	F covers E and E covers F	E and F are logically implied	E and F have same closure	none of the above
10	Collections of operations that form a single logical unit of work are called _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Transactions	Views	Networks	Units	Transactions
11	A transaction that has not been completed successfully is called as _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Aborted transaction	Compensating transaction	Aborted transaction	Active transaction	Partially committed transaction
12	Which property of transactions is required by concurrent transactions?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	All of the mentioned	Atomicity	Durability	Isolation	All of the mentioned
13	A system is in a _____ state if there exists a set of transactions such that every transaction in the set is waiting for another transaction in the set.		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Deadlock	Idle	Waiting	Deadlock	Ready
14	The two phase locking protocol consists which of the following phases?		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	More than one of the mentioned	Growing phase	Shrinking phase	More than one of the mentioned	None of the mentioned
15	The validation (Ti) is given when _____		Attempt All Questions	15 x 2= 30	2		Single Choice	Brilliant	Ti finished its read phase and started its validation phase	when read phase is started	Ti finished its read phase and started its validation phase	when finish phase has started	None of the above
16	When the transaction is executing it is in _____		Glossary I	Glossary I	2		Single Choice	Brilliant	Active State	Partially Committed State	Active State	Failed State	Committed State
17	When transaction has been discovered that it cannot , execute any further, it is in _____		Glossary I	Glossary I	2		Single Choice	Brilliant	Failed State	Partially Committed State	Active State	Failed State	Committed State

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty	Correct	Option1	Option2	Option3	Option4
18	When transaction has successfully completed, it is in _____		Glossary I	Glossary I	2		Single Choice	Brilliant	Committed State	Partially Committed State	Active State	Failed State	Committed State
19	When the final statement has been executed, it is in _____		Glossary I	Glossary I	2		Single Choice	Brilliant	Partially Committed State	Partially Committed State	Active State	Failed State	Committed State
20	All the attributes that can be determined by that attribute is the _____		Glossary II	Glossary II	2		Single Choice	Brilliant	Closure of an Attribute	Closure of an Attribute	Candidate Key	Canonical Cover	Trivial
21	The minimal functional dependencies is the _____		Glossary II	Glossary II	2		Single Choice	Brilliant	Canonical Cover	Closure of an Attribute	Candidate Key	Canonical Cover	Trivial
22	X U Y gives the relation R is a _____ Dependency		Glossary II	Glossary II	2		Single Choice	Brilliant	Trivial	Closure of an Attribute	Candidate Key	Canonical Cover	Trivial
23	If an attribute A uniquely defines all other attributes, then the attribute A is the _____ 		Glossary II	Glossary II	2		Single Choice	Brilliant	Candidate Key	Closure of an Attribute	Candidate Key	Canonical Cover	Trivial
24	A Version of _____ is created in Multiversion Scheme		Glossary III	Glossary III	2		Single Choice	Brilliant	Data Item 	Read Phase	TS(Ti)	Data Item 	Files
25	 _____ can be defined as a Granule in Multiple Granularity Protocol		Glossary III	Glossary III	2		Single Choice	Brilliant	Files	Read Phase	TS(Ti)	Data Item	Files
26	 _____ is used in Timestamp ordering Protocol		Glossary III	Glossary III	2		Single Choice	Brilliant	TS(Ti)	Read Phase	TS(Ti)	Data Item	Files
27	_____ is used in Validation Based Protocol		Glossary III	Glossary III	2		Single Choice	Brilliant	Read Phase	Read Phase	TS(Ti)	Data Item	Files
28	 _____ specifies that the value of each attribute is atomic.		Glossary IV	Glossary IV	2		Single Choice	Brilliant	Domain Constraint	Domain Constraint	Entity Integrity Constraint	Key Constraint	Referential Integrity Constraint
29	_____ specifies that the value of a foreign key must exist as some value of the primary key to which it refers.		Glossary IV	Glossary IV	2		Single Choice	Brilliant	Referential Integrity Constraint	Domain Constraint	Entity Integrity Constraint	Key Constraint	Referential Integrity Constraint
30	_____ Specifies that two tuple cannot have the same set of attributes.		Glossary IV	Glossary IV	2		Single Choice	Brilliant	Key Constraint	Domain Constraint	Entity Integrity Constraint	Key Constraint	Referential Integrity Constraint
31	_____ specifies that primary key cannot be null		Glossary IV	Glossary IV	2		Single Choice	Brilliant	Entity Integrity Constraint	Domain Constraint	Entity Integrity Constraint	Key Constraint	Referential Integrity Constraint
32	_____ has constraints like cardinality ratio and participation		Glossary V	Glossary V	2		Single Choice	Brilliant	Relationship	Domain	Attributes	Relationship	Entity
33	_____ specifies real world object or thing		Glossary V	Glossary V	2		Single Choice	Brilliant	Entity	Domain	Attributes	Relationship	Entity
34	 _____ is the properties that describe it.		Glossary V	Glossary V	2		Single Choice	Brilliant	Attribute	Domain 	Relationship	Attribute	Entity
35	 _____ is a set of values		Glossary V	Glossary V	2		Single Choice	Brilliant	Domain	Domain	Relationship	Attribute	Entity