

## CS-403 Final Term Exams Preparation Virtual University

Sr	Questions	Answers Choice
1	Which feature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss?	A. User accessible catalog B. Data processing C. Authorization service D. Recovery service
2	Which of the following statements is true about the views?	A. view is always a complete set of all the tables in a database B. View can not be used for retrieving data C. The results of using a view are not permanently stored in the database. D. Rows can not be updated or deleted in the view
3	Which of the following is true about TRUNCATE?	A. Can be Rolled back. B. Activates Triggers C. is DML Command. D. Resets identity of the table
4	Which of the following is the correct way to find out the size of cartesian product incase of CROSS JOIN?	A. the number of columns in the first table multiplied by the number of columns in the second table. B. the number of columns in the first table multiplied by the number of rows in the second table C. the number of rows in the first table multiplied by the number of columns in the first table D. the number of rows in the first table multiplied by the number of rows in the second table
5	Suppose there are 8 rows and 4 columns in TABLE1 and 3 rows and 4 columns in TABLE2; what is the size of the cartesian product incase of CROSS JOIN between these two tables?	A. 24 ( The number of rows in the first table multiplied by the number of rows in the second table ) B. 32 C. 12 D. 16
6	Which of the following is not one of the properties of Transaction?	A. atomicity B. consistency C. redundancy D. durability
7	Which of the following is INCORRECT about VIEWS?	A. It is not possible to left out the data which is not required for a specific view. B. A database view displays one or more database records on the same page. C. Views can be used as security mechanisms D. Views are generally used to focus the perception each user has of the database.
8	Each course section is assigned a particular faculty member, and each course section corresponds to a particular course. Conceptually, what is the relationship between faculty and course (not course section).	A. 1:1 B. 1:M C. M:M D. Ternary
9	Which of the following is used to add or drop columns in an existing table?	A. ALTER B. HAVING C. SELECT D. THEN
10	Which of the following is a correct way of selecting all the columns from a table called PERSONS?	A. SELECT FROM * Persons B. SELECT * FROM Persons C. SELECT * WHERE Persons D. SELECT WHERE * Persons
11	Which of the following is NOT a feature of Indexed sequential files?	A. Records are stored in sequence and index is maintained. B. Dense and nondense types of indexes are maintained.

		<p>C. Track overflows and file overflow areas can not be ensured</p> <p>D. Cylinder index increases the efficiency</p>
12	Which of the following serves as a milestone or reference point in the log file?	<p>A. Constraints</p> <p>B. Relations</p> <p>C. Check points</p> <p>D. Transactions identities</p>
13	Which of the following is not true regarding DB transactions?	<p>A. A set of database operations that are processed partly</p> <p>B. A database transaction is a logical unit of database operations</p> <p>C. A database transaction must be atomic</p> <p>D. A database transaction must contains the ACID property</p>
14	Which of the following are the general activities, which are performed during the development of application programs?	<p>A. Data input programs</p> <p>B. Editing</p> <p>C. Display</p> <p>D. All of given</p>
15	Browser based forms are developed in the following tools EXCEPT	<p>A. HTML</p> <p>B. Scripting language</p> <p>C. Front Page</p> <p>D. Web-based Forms</p>
16	Which of the following is not a form of optical disk?	<p>A. CD ROM</p> <p>B. WORM</p> <p>C. Erasable Optical</p> <p>D. EEPROM</p>
17	Which of the following is the correct description of cache hit?	<p>A. When data is found in the cache</p> <p>B. When data is removed in the cache</p> <p>C. The number of times the cache is accessed directly by the processor</p> <p>D. When data is lost from the cache</p>
18	In which of the following situations, Clustering is suitable:	<p>A. Frequently updating</p> <p>B. Relatively static</p> <p>C. Relatively deletion</p> <p>D. Relatively dynamic</p>
19	Only one type of constraint can be enforced in any table by CREATE command	<p>A. True</p> <p>B. False</p> <p>C. Not Sure</p>
20	Which of the following is disadvantage of chaining technique to handle the collisions?	<p>A. Unlimited Number of elements</p> <p>B. Fast re-hashing</p> <p>C. Overhead of multiple linked lists</p> <p>D. Maximum number of elements must be known</p>
21	An entity type is	<p>A. defined when the database is actually constructed</p> <p>B. a specific type such as an integer, text, date, logical etc</p> <p>C. a coherent set of similar objects that we want to store data on (e.g. STUDENT, COURSE, CAR)</p> <p>D. defined by the database designer</p>
22	An entity can be logically connected to another by defining a ____.	<p>A. hyperlink</p> <p>B. common attribute</p> <p>C. primary key</p> <p>D. superkey</p>
23	You can't modify more than one table at a time through a view.	<p>A. True</p> <p>B. False</p>
24	Which of the following is one of the purposes of using DML commands?	<p>C. Not Sure</p> <p>A. Creating databases</p> <p>B. Destroying databases</p> <p>C. Inserting data in tables</p> <p>D. Non of the above</p>
25	What is the alternate name of Data Dictionary?	<p>A. Index</p> <p>B. Metadata</p> <p>C. Data</p> <p>D. System Catalog</p>
26	Which of the following are the general activities, which are performed during the development of application programs?	<p>A. Data input programs</p> <p>B. Editing</p> <p>C. Display</p> <p>D. All of given</p>

A. It is the process of attempting to

27	Which of the following is not true about De-normalization?	<p>A. It is the process of attempting to optimize the performance of a database</p> <p><b>B. De-normalization is a technique to move from lower to higher normal forms of database modeling</b></p> <p>C. It enhances the performance of DB</p> <p>D. In de-normalization it is required to add redundant data.</p>
28	Which of the following gives all the fields from employee table named as EMP?	<p>A. <b>SELECT * from EMP;</b></p> <p>B. SELECT emp* from EMP'</p> <p>C. SELECT emp_id where EMP;</p> <p>D. SELECT * where EMP;</p>
29	While recovering data, which of the following files does a recovery manager examines at first?	<p>A. A system file</p> <p><b>B. Log file</b></p> <p>C. Data dictionary</p> <p>D. Metadata</p>
30	Which of the following is NOT a feature of Indexed sequential files?	<p>A. Records are stored in sequence and index is maintained</p> <p>B. Dense and nondense types of indexes are maintained</p> <p><b>C. Track overflows and file overflow areas can not be ensured.</b></p> <p>D. Cylinder index increases the efficiency</p>
31	ALTER TABLE exams RENAME COLUMN Q_description TO Question_Descp, Std_ID to Student_ID. Syntax of ALTER TABLE is NOT correct.	<p>A. True</p> <p><b>B. False</b></p> <p>C. Not Sure</p>
32	Which of the following SQL commands deletes a record of an employee with the employee_id 12345, from a table named PERSON.	<p><b>A. DELETE FROM person WHERE employee_id = '12345'</b></p> <p>B. DELETE WHERE person FROM employee_id = 12345</p> <p>C. DROP FROM person WHERE employee_id = 12345</p> <p>D. DELETE WHERE person WHERE employee_id = 12345</p>
33	Which of the following is NOT a component of a DFD? Select correct option:	<p>A. Dataflow</p> <p>B. Datastore</p> <p>C. External entities</p> <p><b>D. Relationship between external entities</b></p>
34	Laser records data by burning microscopic holes in the surface of the disk with a	<p>A. Hard disk</p> <p>B. RAM</p> <p><b>C. Optical disk</b></p> <p>D. Floppy disk</p>
35	Which of the following concepts is applicable with respect to 3NF?	<p>A. Full functional dependency</p> <p>B. Any kind of dependency</p> <p><b>C. Transitive dependency</b></p> <p>D. Partial functional dependency</p>
36	Which of the following is NOT a feature of a good interface?	<p>A. Consistency</p> <p>B. Process based</p> <p><b>C. Data structure based</b></p> <p>D. User friendly</p>
37	Making a change to the conceptual schema of a database but not affecting the existing external schemas is an example of	<p>A. Physical data independence.</p> <p>B. Concurrency control</p> <p><b>C. Logical data independence.</b></p> <p>D. Functional dependency</p>
38	GRANT SELECT, UPDATE(Designation) ON Employee TO Amali,Hiruni WITH GRANT OPTION; What does this SQL statement do?	<p>A. Grant permission to Amali,only to retrieve data from Employee table and grant permission to Hiruni, only to update the designation from Employee table.</p> <p>B. Grant permission to Hiruni in order to grant, select and update permission to Amali.</p> <p>C. Grant permission to Amali &amp; Hiruni to update designation of employees in the Employee table</p> <p><b>D. Grant permission to Amali and Hiruni to update all data except designation in Employee table</b></p>
39	Which key word is available in SQL to enforce referential integrity?	<p>A. Check</p> <p><b>B. Primary Key</b></p> <p>C. Set Default</p> <p>D. Unique</p>

40	Which of the following statements are Data Definition Language command?	A. INSERT B. UPDATE C. GRANT D. TRUNCATE
41	How many clustered index(es) do each database table have?	A. 2 B. 3 C. 4 D. 1
42	Which of the following is true about DELETE command?	A. is DDL Command B. Resets identity of the table C. cannot activate a trigger D. Can be Rolled back
43	Which of the following will be deleted relating to a table if you use TRUNCATE command?	A. all rows in a table B. indexes C. table structure and its columns D. constraints
44	Which of the following is not a feature of TRANSACTION?	A. Users should be able to regard the execution of each transaction as atomic B. Each transaction, run by itself C. must preserve the consistency of the database D. dependant on other concurrent transactions
45	Suppose there are 4 fields in a table named CUST (customer_id, first_name, last_name, phone). Which of the following gives all the information of the customers in the table whose last name is ALI?	A. SELECT * FROM CUST WHERE last_name='ALI'; B. SELECT * FROM CUST WHERE last_name=ALI; C. SELECT * FROM CUSTOMER WHERE name=ALI; D. SELECT * FROM CUSTOMER WHERE last_name=ALI;
46	Identify the correct statement with respect to normalization.	A. Normalization is a formal technique that can be used only at the starting phase of the database design. B. Normalization can be used as a top-down standalone database design technique. C. The process of normalization through decomposition must achieve the lossless join property at any cost whereas the dependency reservation property is sometimes sacrificed. D. The process of normalization through decomposition must achieve the dependency reservation property at any cost whereas the lossless join property is sometimes sacrificed.
47	Which of the following is not true with respect to denormalization ?	A. A denormalized data model is not the same as a data model that has not been normalized B. Denormalization takes place before the normalization process C. It is an attempt to optimize the performance of database D. Denormalization process can not be initiated before the Database design
48	Which of the following is incorrect with respect to indexed sequential files?	A. New records are added to an overflow file B. Record in main file that precedes it is updated to contain a pointer to the new record C. The overflow is merged with the main file during a batch update D. Multiple indexes for the same key field cannot be setup
49	Which of the following types of partitioning reduces the chances of unbalanced partitions?	A. vertical B. List C. Hash D. Range
50	DML commands are used for:	A. inserting data into databases B. creating databases C. destroying databases D. creating DB objects
		A. At the physical level, pointer or hashed address scheme may be employed to provide a certain degree

51	Which of the following is INCORRECT with respect to file systems?	<p>employed to provide a certain degree of data independence at the user level.</p> <p>B. A logical record is concerned with efficient storage of information in the secondary storage devices.</p> <p>C. Some physical organisations use pointers to record blocks to locate records on disk.</p> <p>D. The efficiency of a file system depends on how efficiently operations such as retrieve, insert, update, delete may be performed on the information stored in the file.</p>
52	Which of the following is correct regarding Dataflow diagram?	<p>A. Single DFD is required to represent a system</p> <p>B. The dataflow must be bidirectional</p> <p>C. Created at increasing levels of detail</p> <p>D. Used to represent the relationships among the external entities</p>
53	Select the correct statement among the following on proper naming of schema constructs:	<p>A. Entity type name applies to all the entities belonging to that entity type and therefore a plural name is selected for entity type.</p> <p>B. In the narrative description of the database requirements, verbs tend to indicate the names of relationship types.</p> <p>C. The nouns arising from a database requirement description can be considered as names of attributes.</p> <p>D. Additional nouns which are appearing in the narrative description of the database requirements represent the weak entity type names.</p>
54	Structural constraints of a relationship type refer to	<p>A. identifying the owner entity type relevant to a given entity type</p> <p>B. whether the existence of an entity depends on it being related to another entity via the relationship type.</p> <p>C. the role that a participating entity from the entity type plays in each relationship instance</p> <p>D. the constraints applicable in granting access to tables, columns and views in a database schema.</p>
55	Identify the correct statement	<p>A. Entity integrity constraints specify that primary key values can be composite</p> <p>B. Entity integrity constraints are specified on individual relations.</p> <p>C. Entity integrity constraints are specified between weak entities.</p> <p>D. When entity integrity rules are enforced, a tuple in one relation that refers to another relation must refer to an existing tuple.</p>
56	What is the impact of setting multiple indexes for the same key, in index sequential files?	<p>A. Multiple indexes for the same key can not be set</p> <p>B. It increases efficiency</p> <p>C. It decreases efficiency</p> <p>D. It will increase complexity as the access time will be increased</p>
57	Which of the following is not true regarding Indexes?	<p>A. Index can be defined even when there is no data in the table</p> <p>B. It support Range selections</p> <p>C. It can be created using 'Create Index' statement</p> <p>D. It can not be created on composite attributes</p>
58	The main memory of a computer system is also known as	<p>A. ROM</p> <p>B. RAM</p> <p>C. PROM</p> <p>D. Hard disk</p>
59	_____ is a control that enables users to select one option from an associated list; users can also type an option.	<p>A. Combo box</p> <p>B. Button</p> <p>C. Text box</p>

		D. Static area
60	_____ records data by burning microscopic holes in the surface of the disk with a laser.	A. Hard disk B. RAM C. Optical disk D. Floppy disk
61	Which of following is NOT generally the aim of data partitioning and placement of data?	A. Reduce Workload B. Balance Workload C. Merging different relations D. Speed up rate of useful works.
62	ALTER TABLE exams RENAME COLUMN Q_description TO Question_Descp, Std_ID to Student_ID. Syntax of ALTER TABLE is NOT correct	A. True B. False C. Not Sure
63	Which feature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss?	A. User accessible catalog B. Data processing C. Authorization service D. Recovery service
64	Which of the following is not true about relational tables?	A. Column values are of the same kind B. Each row is unique C. Each column must have a unique name. D. The sequence of rows is significant.
65	What is the maximum limit of keys in context with Indexed sequential files?	A. 7 B. 255 C. 1 D. 235
66	What is the impact of setting multiple indexes for the same key, in index sequential file	A. Multiple indexes for the same key can not be set B. It increases efficiency C. It decreases efficiency D. It will increase complexity as the access time will be increased
67	Which of the given techniques is/are used to improve query performance in database?	A. Good File organization B. Indexing C. Both Indexing and Good File organization D. Select only one record per query
68	_____ is a control that users click to perform an action, set or toggle a state, or set an option.	A. Button B. Text box C. Input form D. Report
69	_____ is a control that enables users to select one option from an associated list; users can also type an option	A. Combo box B. Button C. Text box D. Static area
70	Partitions may become unbalanced in:	A. Range partitioning B. Hash partitioning C. List partitioning D. Vertical partitioning
71	ALTER TABLE exams ALTER COLUMN Q_description varchar(50) Syntax of ALTER TABLE is NOT correct.	A. True B. False C. Not Sure
72	In which of the following, Materialized Views are suitable	A. Data warehousing B. Decision support C. Mobile computing D. All of the Given
73	A software package designed to store and manage databases	A. Database B. DBMS C. Data model D. Data
74	A superkey that does not contain a subset of attributes that is itself a superkey is called a _____	A. candidate key B. primary key C. superkey D. secondary key
75	A _____ relationship exists when an association is maintained within a single entity.	A. unary B. ternary C. binary D. weak
		A. Undoing all the updates made by the particular transaction which is the cause of deadlock. B. ...

76	Which of the following is NOT one of the ways of resolving deadlocks?	<p>B. A message is passed to the victim and depending on the system the transaction may or may not be started again automatically</p> <p>C. Picking a list of all previously completed transactions and undoing all the updates.</p> <p>D. Rollback 'victim' transaction and restart it</p>
77	Which of the following statements are Data Definition Language command?	<p>A. INSERT</p> <p>B. UPDATE</p> <p>C. GRANT</p> <p>D. TRUNCATE</p>
78	Suppose there are 4 rows and 3 columns in TABLE1 and 6 rows and 5 columns in TABLE2; what is the size of the Cartesian product incase of CROSS JOIN between these two tables?	<p>A. 24</p> <p>B. 54</p> <p>C. 6</p> <p>D. 1</p>
79	Consider the relation Interview(CandidateNo, InterviewDate, InterviewTime, StaffNo, RoomNo) and the following functional dependencies. FD1 : CandidateNo, InterviewDate -> InterviewTime, StaffNo, RoomNo FD2 : RoomNo, InterviewDate, InterviewTime -> StaffNo, CandidateNo FD3 : StaffNo, InterviewDate -> RoomNo Which of the following is correct?	<p>A. The relation Interview is in 3NF</p> <p>B. The relation Interview is in BCNF</p> <p>C. The FD3 violates 3NF.</p> <p>D. The FD2 violates 2NF.</p>
80	Which of the following is one of the purposes of using DDL commands?	<p>A. inserting records into databases</p> <p>B. updating records into databases</p> <p>C. manipulating databases</p> <p>D. creating and destroying databases</p>
81	Which of the following statements creates a database named COMPANY.	<p>A. CREATE DATABASE company</p> <p>B. CREATE DB company</p> <p>C. ADD DATABASE copmany</p> <p>D. CREATE company DATABASE</p>
82	Consider a transaction which includes following operations Z= Z + 10 Write Z ... Suppose that the value of Z after addition and the execution of this operation is 17. Now against the write operation the entry made in the log file will be What does Z reflects in the above entry?	<p>A. Object being updated</p> <p>B. Identity of the transaction</p> <p>C. Object value</p> <p>D. Identity of the next transaction to be executed</p>
83	Which of the following is not true about input forms?	<p>A. Provide an easy, effective, efficient way to enter data into a table</p> <p>B. Especially useful when the person entering the data is not familiar with the inner workings</p> <p>C. Provide different controls to add data into the tables</p> <p>D. One input forms can populate one table at a time</p>
84	Which of the following is an example of volatile memory?	<p>A. RAM</p> <p>B. ROM</p> <p>C. Flash memory</p> <p>D. CPU</p>
85	Which of the following is Advantage of Re-Hashing technique to handle the collisions?	<p>A. Collisions don't use primary table space</p> <p>B. Unlimited number of elements</p> <p>C. Fast access through use of main table space</p> <p>D. Overhead of multiple linked lists</p>
86	Select 'NORTH', CUSTOMER From CUST_DTLS Where REGION = 'N' Order By CUSTOMER Union Select 'EAST', CUSTOMER From CUST_DTLS Where REGION = 'E' Order By CUSTOMER The above statement	<p>A. Has an error - the string should be in double quotes</p> <p>B. Has an error - ORDER BY clause.</p> <p>C. Does not have an error.</p> <p>D. Has an error - the string in single quotes 'NORTH' and 'SOUTH'.</p>
87	Who is responsible for authorizing access to the database, for coordinating and monitoring its use ?	<p>A. Database Designers</p> <p>B. Database Administrators</p> <p>C. End Users</p> <p>D. Application Programmers</p>
88	A super key that does not contain a subset of attributes that is itself a super key is called a ____.	<p>A. candidate key</p> <p>B. primary key</p> <p>C. superkey</p> <p>D. secondary key</p>
89	A ____ entity has a primary key that is partially or totally derived from the parent entity in the relationship.	<p>A. strong</p> <p>B. weak</p> <p>C. business</p> <p>D. relationship</p>
90	Which of the following SQL keywords is not used with DDL statements?	<p>A. Table</p> <p>B. Update</p> <p>C. Create</p> <p>D. Alter</p>

91	Identify the constraint that limits the values that can be placed in a column.	<p>A. NOT NULL</p> <p><b>B. CHECK</b></p> <p>C. FOREIGN KEY</p> <p>D. UNIQUE</p>
92	Suppose there are 8 rows and 4 columns in TABLE1 and 3 rows and 4 columns in TABLE2; what is the size of the cartesian product incase of CROSS JOIN between these two tables?	<p><b>A. 24</b></p> <p>B. 32</p> <p>C. 12</p> <p>D. 16</p>
93	Suppose there are 4 fields in a table named WORKER (Id, first_name, last_name, joining_year). Which of the following gives all the information of the workers who have joined after 1965?	<p>A. SELECT * FROM WORKER WHERE joining_Year&gt;'1965';</p> <p><b>B. SELECT * FROM WORKER WHERE joining_Year&gt;'1965';</b></p> <p>C. SELECT * FROM WORKER AND joining_Year&gt;'1965';</p> <p>D. SELECT * WHERE joining_Year&gt;'1965';</p>
94	Which of the following enforces a relation into 1st normal form?	<p><b>A. The domain of attribute must include only atomic values.</b></p> <p>B. Every non-key attribute is fully functionally dependent on primary key</p> <p>C. non-key attribute is non-transitively dependent on primary key.</p> <p>D. Every non-key attribute is partially dependent on super key</p>
95	Which of the following is NOT a feature of HASH ACCESS?	<p>A. indexes to search or maintain</p> <p>B. Very fast direct access</p> <p>C. Inefficient sequential access</p> <p><b>D. Use when direct access is needed, but sequential access is not.</b></p>
96	Which of the following is true about application programs?	<p>A. develop before the database design</p> <p>B. Tools selection is made after the development database</p> <p><b>C. meant to perform different operations by the user</b></p> <p>D. must to design before the designing and developing database</p>
97	Which of the following is incorrect with respect to indexed sequential files?	<p>A. New records are added to an overflow file</p> <p>B. Record in main file that precedes it is updated to contain a pointer to the new record</p> <p>C. The overflow is merged with the main file during a batch update</p> <p><b>D. Multiple indexes for the same key field cannot be setup</b></p>
98	A relation (from the relational database model) consists of a set of tuples, which implies th	<p>A. Relational model supports multi-valued attributes whose values can be represented in sets.</p> <p>B. for any two tuples, the values associated with all of their attributes may be the same</p> <p><b>C. for any two tuples, the values associated with one or more of their attributes must differ.</b></p> <p>D. all tuples in a particular relation may have different attributes.</p>
99	The information regarding 'views' and 'Integrity constraints' are found in	<p><b>A. Both Data Dictionary and System Catalog</b></p> <p>B. System Catalog</p> <p>C. Data Dictionary</p> <p>D. Indexes</p>
100	Which of following is not the feature of Indexes?	<p>A. consume storage space</p> <p>B. must be refreshed when the data in their master tables changes</p> <p>C. improve the performance of SQL execution when they are used for query rewrites</p> <p><b>D. can be accessed directly using a SELECT statement</b></p>
101	Which of the following is not a type of user interface?	<p>A. Graphical User Interface (GUI)</p> <p>B. Forms</p> <p><b>C. DB tables</b></p> <p>D. Text based</p>



102	Which of the following is not true about input forms?	<p>A. Provide an easy, effective, efficient way to enter data into a table</p> <p>B. Especially useful when the person entering the data is not familiar with the inner workings</p> <p>C. Provide different controls to add data into the tables</p> <p>D. One input forms can populate one table at a time</p>
103	In SQL queries, while creating tables or relations in database, key columns may be specified by	<p>A. Data type</p> <p>B. Null</p> <p>C. Not Null</p> <p>D. Owner</p>
104	Materialized views and Indexes are NOT similar by the following way(s).	<p>A. hey consume storage space</p> <p>B. They must be refreshed when the data in their master tables changes</p> <p>C. They can be accessed directly using a SELECT statement</p> <p>D. All of the Given</p>
105	The ____ constraint specifies whether each entity supertype occurrence must also be a member of at least one subtype.	<p>A. specialization</p> <p>B. uniqueness</p> <p>C. inheritance</p> <p>D. completeness</p>
106	In a conceptual model for a university, what type of relationship exists between Grade and Student entitie	<p>A. 1:1</p> <p>B. 1:M</p> <p>C. M:M</p> <p>D. Ternary</p>
107	_____ records data by burning microscopic holes in the surface of the disk with a laser.	<p>A. Hard disk</p> <p>B. RAM</p> <p>C. Optical disk</p> <p>D. Floppy disk</p>
108	_____ is a control that presents a set of choices from which a user can select one or more items; items can be text, graphics, or both.	<p>A. Text input</p> <p>B. Report</p> <p>C. Button</p> <p>D. List box</p>
109	_____ is a control that enables users to select one option from an associated list; users can also type an option.	<p>A. Combo box</p> <p>B. Button</p> <p>C. Text box</p> <p>D. Static area</p>
110	_____ is a control that users click to perform an action, set or toggle a state, or set an option.	<p>A. Button</p> <p>B. Text box</p> <p>C. Input form</p> <p>D. Report</p>
111	Which of the following should not be a property of a database transaction?	<p>A. Atomicity</p> <p>B. Isolation</p> <p>C. Durability</p> <p>D. Divergence</p>
112	Which of the following is the correct way of removing the Index called branchNoIndex?	<p>A. DROP INDEX branchNoIndex;</p> <p>B. APPEND INDEX branchNoIndex;</p> <p>C. REMOVE INDEX branchNoIndex;</p> <p>D. DEL INDEX branchNoIndex;</p>
113	Identify the correct statement.	<p>A. Referential integrity constraints check whether the primary key values are unique</p> <p>B. Referential integrity constraints check whether an attribute value lies in the given range</p> <p>C. Referential integrity constraints are specified between entities having recursive relationships</p> <p>D. When Referential integrity rules are enforced, a tuple in one relation that refers to another relation must refer to an existing tuple.</p>
114	Identify the correct statement about ANSI/SPARC architecture.	<p>A. The external level is not concerned with individual user perceptions</p> <p>B. The internal level, in a database system, will always be relational</p> <p>C. Any given database has exactly one conceptual schema and one physical schema, but it may have several external schemas.</p> <p>D. A data definition language is used to define the internal schema</p>
115	Which of the following is not a type of functional dependency?	<p>A. Non-transitive dependency</p> <p>B. Full functional dependency</p>

115	Which of the following concept is applicable with respect to 2NF?	C. Partial dependency D. Transitive dependency
116	Suppose there are 4 fields in a table named CUST (customer_id, first_name, last_name, phone). Which of the following gives all the information of the customers in the table whose last name is ALI?	A. <code>SELECT * FROM CUST WHERE last_name='ALI';</code> B. <code>SELECT * FROM CUST WHERE last_name=ALI;</code> C. <code>SELECT * FROM CUSTOMER WHERE name=ALI;</code> D. <code>SELECT * FROM CUSTOMER WHERE last_name=ALI;</code>
117	Identify the advantage of DELETE command over TRUNCATE.	A. Can be Rolled back B. is DDL Command. C. cannot activate a trigger. D. faster and uses fewer system
118	Making a change to the conceptual schema of a database but not affecting the existing external schemas is an example o	A. Physical data independence B. Concurrency control. C. Logical data independence. D. Functional dependency
119	GRANT SELECT, UPDATE(Designation) ON Employee TO Amali,Hiruni WITH GRANT OPTION; What does this SQL statement do?	A. Grant permission to Amali,only to retrieve data from Employee table and grant permission to Hiruni, only to update the designation from Employee table. B. Grant permission to Amali & Hiruni to retrieve data from Employee table C. Grant permission to Hiruni in order to grant, select and update permission to Amali. D. Grant permission to Amali and Hiruni to update all data except designation in Employee table
120	Which of the following statements are Data Manipulation Language command?	A. INSERT B. GRANT C. TRUNCATE D. CREATE
121	Which of the following is NOT a feature of Context DFD?	A. one process (which represents the entire system) B. all sources/sinks (external entities) C. data flows linking the process to the sources and sinks (external entities) D. sub-processes (which explain and decomposed the major process into small processes)
122	Which of the following is true for the relational model?	A. Degree of a relation is the number of rows in a relation B. Null value is a blank or zero value given to an attribute value when its value is inapplicable or its value is unknown C. Complex key is a key consisting of more than one attribute. D. Constraint is a rule that restricts the values in a database.
123	Which of the following most certainly implies the need for an entire table to implement?	A. A binary relationship B. A ternary relationship C. A recursive relationship D. An identifying relationship
124	Which of the following constraints enforces entity integrity?	A. PRIMARY KEY B. FOREIGN KEY C. CHECK D. NOT NULL
125	In a conceptual model for a university, what type of relationship exists between Grade and Student entities?	A. 1:1 B. 1:M C. M:M D. Ternary
126	Controlling redundancy in a database management system DOES NOT help to	A. avoid duplication B. avoid unnecessary wastage of storage space C. avoid unauthorised access to data D. avoid inconsistency among data
127	Which of the following is NOT a part of the database design process?	A. Planning, designing and implementing database systems B. Establishing standards and procedures for database systems

127	Which of the following functions are NOT performed by a database administrator?	<p>C. Communicating with database users</p> <p>D. Allocation of storage locations and data structures</p>
128	Select the correct statement about the ANSI/SPARC architecture	<p>A. The conceptual level is a level of indication between the internal level and the external level.</p> <p>B. The internal level in a database system will definitely be relational.</p> <p>C. Any given database has many conceptual schemas and one physical schema, but it has only one external schemas.</p> <p>D. The external level is not concerned with individual user perceptions, while the conceptual level is concerned with a community user perception.</p>
129	Which of the following is a correct way to implement one-to-many relationship while designing tables?	<p>A. by splitting the data into two tables with primary key and foreign key relationships</p> <p>B. using a junction table with the keys from both the tables forming the composite primary key of the junction table.</p> <p>C. by splitting each table into three</p> <p>D. as a single table and rarely as two tables with primary and foreign key relationships</p>
130	Which of the following is not a benefit of normalization?	<p>A. Minimize insertion anomalies</p> <p>B. Minimize deletion anomalies</p> <p>C. Minimize updation anomalies</p> <p>D. Maximize redundancy</p>
131	The Entity Relation Model models	<p>A. Entities, Relationships and Processes</p> <p>B. Entities and Relationships</p> <p>C. Relationships</p> <p>D. Entities</p>
132	As part of database naming conventions, attribute names should use suffixes such as ID, NUMBER or CODE for the _____.	<p>A. primary key</p> <p>B. foreign key</p> <p>C. index</p> <p>D. determinant</p>
133	User rights information is stored in	<p>A. Physical database</p> <p>B. Catalog</p> <p>C. Logical database</p> <p>D. Buffer</p>
134	A relation (from the relational database model) consists of a set of tuples, which implies that	<p>A. all tuples in a relation must be distinct.</p> <p>B. relational model supports multi-valued attributes whose values can be represented in sets</p> <p>C. for any two tuples, the values associated with all of their attributes may be the same</p> <p>D. all tuples in a particular relation may have different attributes.</p>
135	Consider the relation Interview(CandidateNo, InterviewDate, InterviewTime, StaffNo, RoomNo) and the following functional dependencies. FD1 : CandidateNo, InterviewDate -> InterviewTime, StaffNo, RoomNo FD2 : RoomNo, InterviewDate, InterviewTime -> StaffNo, CandidateNo FD3 : StaffNo, InterviewDate -> RoomNo Which of the following is correct?	<p>A. The relation Interview is in 3NF</p> <p>B. The relation Interview is in BCNF.</p> <p>C. The FD3 violates 3NF.</p> <p>D. The FD2 violates 2NF</p>
136	Identify the INCORRECT statement among the given.	<p>A. An entity may be an object with a physical existence like a car, a house or an Employee</p> <p>B. One cannot consider something which has conceptual existence like a course in a degree program as an entity</p> <p>C. Age can be considered as a single value attribute of a person.</p> <p>D. An entity type describes the schema or intension for a set of entities which share the same structure.</p>
137	A collection of concepts that can be used to describe the structure of a database	<p>A. Database</p> <p>B. DBMS</p> <p>C. Data model</p> <p>D. Data</p>
		A. specialization

138	The ____ constraint specifies whether each entity supertype occurrence must also be a member of at least one subtype	<p>A. specialization</p> <p>B. uniqueness</p> <p>C. inheritance</p> <p>D. completeness</p>
139	Database management systems, operating systems, applications and utilities are all examples of ____.	<p>A. hardware</p> <p>B. software</p> <p>C. computer infrastructure</p> <p>D. input and output</p>
140	Which of the following concepts is applicable with respect to 2NF?	<p>A. Full functional dependency</p> <p>B. Any kind of dependency</p> <p>C. Transitive dependency</p> <p>D. Non-transitive dependency</p>
141	A database system allows the following EXCEPT	<p>A. management and control of data towards an efficient working of an organisation</p> <p>B. more critical functions in organisations to be computerised and the need to keep a large volume of data available in an up to the minute current state increased.</p> <p>C. any user to access all its data</p> <p>D. integration of data across multiple applications into a single application.</p>
142	The ER- data model is an example of:	<p>A. Physical database</p> <p>B. Logical database</p> <p>C. Relational database</p> <p>D. Conceptual database</p>
143	Which of the following is true about NOT NULL constraint?	<p>A. enforce domain integrity</p> <p>B. limit the values that can be placed in a column</p> <p>C. prevents any actions that would destroy links between tables with the corresponding data values</p> <p>D. enforces the uniqueness of the values in a set of columns</p>
144	Select the correct statement among the following.	<p>A. Role names are not technically necessary in relationship types when all the participating entity types are distinct</p> <p>B. When different entity types participate only once in a single relationship type it is called a recursive relationship.</p> <p>C. Cardinality ratios for binary relationship are displayed on Entity Relationship Diagrams by using a diamond shape notation.</p> <p>D. Partial participation which is also called existence dependency is displayed as a double line connecting the participating entity type to the relationship.</p>
145	Which of the following is true about relational schema?	<p>A. The sequence of columns is significant</p> <p>B. The sequence of rows is significant.</p> <p>C. Contains only derived attributes.</p> <p>D. Values are atomic</p>
146	Which of the following statements is correct with respect to the two relations given above?	<p>A. The two relations are not union-compatible since their attribute names differ.</p> <p>B. The set operations such as CARTESIAN PRODUCT and DIVISION can be applied on these two relations.</p> <p>C. To find out those students who work as instructors, it is necessary to perform the operation <math>\text{Student} \cap \text{Instructor}</math>.</p> <p>D. CS403-MIDTERM SOLVED MCQS with references by MOAAZ(2).pdf</p>
147	A collection of related data is	<p>A. Logical model</p> <p>B. Database</p> <p>C. Data</p> <p>D. Relational model</p>
148	A weak entity type	<p>A. must have total participation in an identifying relationship</p> <p>B. does not have a key attribute(s)</p> <p>C. both (a) and (b)</p> <p>D. none of the above</p>

149	A description on a particular collection of data using the given data model	A. Database B. Schema C. None of the above D. Relation
150	If K is a foreign key in relation R1, then	A. every tuple of R1 has a distinct value for K B. k can not have a null value for tuples in R1 C. K is a key for some other relation. D. K is a primary key for R1.
151	Consider the following statements. A. An entity integrity constraint states that no primary key value can be null. B. A referential integrity constraint is specified between two relations. C. A foreign key cannot be used to refer to its own relation. Identify which of the above statements is/are correct	A. Only A B. Only B C. B and C D. A and B
152	Which of the following enforces a relation into 1st normal form?	A. The domain of attribute must include only atomic values B. Every non-key attribute is fully functionally dependent on primary key C. non-key attribute is non-transitively dependent on primary key. D. Every non-key attribute is partially dependent on super key
153	Which of the following is a feature of PRIMARY KEY constraint?	A. unique identifier for a row within a database table. B. allow any actions that would destroy links between tables C. limit the values that can be placed in a column. D. enforces that the column will only accept null values.
154	Who is responsible for authorizing access to the database, for coordinating and monitoring its use? Select correct option:	A. Database Designer B. Database Administrator C. End User D. Application Programmer
155	Which feature of database provides conversion from inconsistent state of DB to a consistent state ensuring minimum data loss? Select correct option:	A. User accessible catalog B. Data processing C. Recovery service D. Authorization service
156	Which of the following constraints enforces referential integrity?	A. FOREIGN KEY B. CHECK C. PRIMARY KEY D. UNIQUE
157	Which of the following is correct?	A. The relation Interview is in 3NF B. The relation Interview is in BCNF. C. The FD3 violates 3NF. D. The FD2 violates 2NF
158	Which of the following is INCORRECT statement concerning the database design process?	A. During requirements collection and analysis phase, one can gather the data requirements of database users. B. By referring to a high level data model, it is possible to understand the data requirements of the users, entity types, relationships and constraints. C. Transformation of the high level data model into the implementation data model is called logical design or data model mapping D. During the logical design phase of internal storage structures, access paths and file organization for the database files are specified.
159	Consider the following diagram depicting a kind of a relationship type where X and Z are entities and Y is a relationship type: Select the correct statement among the following on the above diagram	A. The relationship type Y is of cardinality ratio 1 : N B. The diagram depicts existence dependencies C. The participation of X in the Y relationship type is total D. The participation of Z in the Y relationship type is partial.
160	A collection of related data is	A. Logical model B. Database C. Data D. Relational model

161	A collection of concepts that can be used to describe the structure of a database	A. Database B. DBMS C. Data model D. Data
162	A superkey that does not contain a subset of attributes that is itself a superkey is called a ____.	A. candidate key B. primary key C. superkey D. secondary key
163	Which of the following concepts is applicable with respect to 2NF?	A. Full functional dependency B. Any kind of dependency C. Transitive dependency D. Non-transitive dependency
164	Identify the factor which enforces a relation in 3NF?	A. Every non-key attribute is fully functionally dependent on primary key B. Every non-key attribute is partially dependent on super key C. The domain of attribute must include only atomic values. D. Every non-key attribute is non-transitively dependent on primary key.
165	Consider two sets A and B. A contains 2 elements and B contains 3. How many elements do their cartesian product contains?	A. 6 B. 9 C. 5 D. 4
166	Identify the operation which is NOT one of the parts of the five basic set operations in relational algebra?	A. Join B. Union C. Cartesian Product D. Set Difference
167	Which of the following concepts is applicable with respect to 3NF	A. Full functional dependency B. Any kind of dependency C. Transitive dependency D. Partial functional dependency
168	Description on particular collection of data using data model	A. Schema B. Relation C. Data base D. None of the above
169	Which one is true regarding relation?	A. Every attribute value Non atomic B. Attribute in table may not have unique name C. table order of the column is relevant D. the order of the rows is irrelevant
170	In a conceptual database model, which of the following most likely represents a valid identifier for a class grades?	A. StudentID B. StudentID, CourseID C. StudentID, CourseID, InstructorID D. StudentID, CourseSectionID
171	Identify the operation which is NOT one of the parts of the five basic set operations in relational algebra?	A. Join B. Union C. Cartesian Product D. Set Difference
172	Making a change to the conceptual schema of a database but not affecting the existing external schemas is an example of	A. Physical data independence B. Concurrency control. C. Logical data independence. D. Functional dependency
173	Select the correct statement among the following on proper naming of schema constructs:	A. Entity type name applies to all the entities belonging to that entity type and therefore a plural name is selected for entity type. B. In the narrative description of the database requirements, verbs tend to indicate the names of relationship types. C. The nouns arising from a database requirement description can be considered as names of attributes D. Additional nouns which are appearing in the narrative description of the database requirements represent the weak entity type names.
		A. When different entity types participate only once in a single relationship type it is called a

174	Select the correct statement among the following	<p>recursive relationship</p> <p>B. Role names are not technically necessary in relationship types when all the participating entity types are distinct</p> <p>C. Cardinality ratios for binary relationship are displayed on Entity Relationship Diagrams by using a diamond shape notation</p> <p>D. Partial participation which is also called existence dependency is displayed as a double line connecting the participating entity type to the relationship .</p>
175	If W, X, Y and Z are attributes of a relation, which of the following inference rules for functional dependencies is correct?	<p>A. If <math>(X, Z) \twoheadrightarrow Y</math> then <math>X \twoheadrightarrow Y</math> and <math>Z \twoheadrightarrow Y</math>.</p> <p>B. If <math>X \twoheadrightarrow Y</math> and <math>X \twoheadrightarrow Z</math> then <math>X \twoheadrightarrow (Y, Z)</math></p> <p>C. If <math>XY</math> then <math>Y \twoheadrightarrow X</math></p> <p>D. If <math>X \twoheadrightarrow Y</math> then <math>(X, Z) \twoheadrightarrow (Y, W)</math>.</p>
176	A candidate key that does not have a null value and is selected to uniquely identify all other attribute values in any given row is called a	<p>A. superkey</p> <p>B. candidate key</p> <p>C. primary key</p> <p>D. secondary key</p>
177	Incase of Context-level Diagram, the system is represented by Select correct option:	<p>A. One process atleast</p> <p>B. Two processes atleast</p> <p>C. One process only</p> <p>D. Any number of processes</p>
178	A _____ is used to maintain a connection between the users of the database system.	<p>A. Mail server</p> <p>B. File Server</p> <p>C. Client-serve</p> <p>D. None of the given.</p>
179	Which of the following is NOT a component of a DFD?	<p>A. Dataflow</p> <p>B. Datastore</p> <p>C. External entities</p> <p>D. Relationship between external entities</p>
180	Which of the following is CORRECT about database management system's languages?	<p>A. Data definition languages are used to specify the conceptual schema only.</p> <p>B. Data manipulation languages are used to create the databases</p> <p>C. Data manipulation languages are used for retrieval, insertion, deletion and modification of data</p> <p>D. Data definition languages are only used to update data in the DBMS.</p>
181	Controlling redundancy in a database management system DOES NOT help to	<p>A. avoid duplication</p> <p>B. avoid unnecessary wastage of storage space</p> <p>C. avoid unauthorised access to data</p> <p>D. avoid inconsistency among data</p>
182	Consider two sets A and B. A contains 3 elements and B contains 4. How many elements do their Cartesian product contains?	<p>A. 12</p> <p>B. 9</p> <p>C. 16</p> <p>D. 7</p>
183	Identify the correct statement with respect to normalization	<p>A. Normalization is a formal technique that can be used only at the starting phase of the database design</p> <p>B. Normalization can be used as a top-down standalone database design technique</p> <p>C. The process of normalization through decomposition must achieve the lossless join property at any cost whereas the dependency reservation property is sometimes sacrificed.</p> <p>D. The process of normalization through decomposition must achieve the lossless join property at any cost whereas the dependency reservation property is sometimes sacrificed.</p>
184	Identify which of the above statements is/are correct.	<p>A. Only A</p> <p>B. Only B</p> <p>C. Only B and C</p> <p>D. Only A and B</p>