

***CS-403 Important Mcq's
For Mid Term !!
Solve By Vu-Topper RM!!***

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Question No:1

(Marks:1)

Vu-Topper RM

The foreign key attribute, which is present as a primary key in another relation is called as _____ of the foreign key attribute.

- A. Binary relation
- B. Composite relation
- C. Home relation**
- D. Recursive relation

Page 134

Question No:2

(Marks:1)

Vu-Topper RM

While mapping many-to-many relationship _____ table(s) are created

- A. One
- B. Two
- C. Three**
- D. Five

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Question No:3

(Marks:1)

Vu-Topper RM

Which is not the function of Database Management System?

- A. A user accessible Catalog
- B. Concurrency Control Services
- C. Failure Response Service**
- D. Support for Data Communication

Question No:4

(Marks:1)

Vu-Topper RM

The conceptual database design can be transformed into any _____.

- A. Data model**
- B. Database design
- C. E-R model
- D. Entity set

Page 125

Question No:5

(Marks:1)

Vu-Topper RM

Which is the second stage in the database development process?

- A. Database design
- B. Preliminary Study
- C. Physical Design
- D. Requirement Analysis**

Question No:6

(Marks:1)

Vu-Topper RM

Functional dependencies under interference rule reflexivity are called _____ dependencies.

- A. Augmentation
- B. Transitivity
- C. Projectivity
- D. Trivial**

Question No:7

(Marks:1)

Vu-Topper RM

If many instances of the “Book” entity are associated with the many instances of the “Student” entity, then the relationship between them is:

- A. One to one
- B. One to many
- C. Many to many**
- D. Many to one

Question No:8

(Marks:1)

Vu-Topper RM

Which of the following constraints enforces entity integrity?

- A. PRIMARY KEY**
- B. FOREIGN KEY
- C. CHECK
- D. NOT NULL

Question No:9

(Marks:1)

Vu-Topper RM

Unary operations involve

- A. Only one relation**
- B. Only two relations
- C. More than two relations
- D. Not more than five relations

Question No:10 (Marks:1) **Vu-Topper RM**

A _____ entity has a primary key that is partially or totally derived from the parent entity in the relationship.

- A. Strong
- B. Weak**
- C. Business
- D. Relationship

Question No:11 (Marks:1) **Vu-Topper RM**

In _____ appropriate data model is chosen.

- A. ERD
- B. Conceptual Database Design
- C. Logical Database Design**
- D. DFA

Question No:12 (Marks:1) **Vu-Topper RM**

Which of the following is drawback of standardization?

- A. Difficult to understand
- B. Uniformity
- C. Lack of uniqueness**
- D. Easy to develop applications

Question No:13 (Marks:1) **Vu-Topper RM**

Recursive relationship is also called _____.

- A. Unary**

- B. Ternary
- C. Primary
- D. Secondary

Question No:14 (Marks:1) **Vu-Topper RM**

DFD does not provide us a way to represent _____

- A. Entities
- B. Decisions**
- C. Date stores
- D. Processes

Question No:15 (Marks:1) **Vu-Topper RM**

A _____ is used to maintain a connection between the users of the database system.

- A. Virtual server
- B. File server**
- C. Client server
- D. FTP server

Question No:16 (Marks:1) **Vu-Topper RM**

Which of the following is an advantage of using the Traditional File Organization?

- A. Time consuming
- B. Data security
- C. Simplicity**
- D. Efficiency

Question No:17 (Marks:1) **Vu-Topper RM**

Which of the following is the input to Analysis Phase?

- A. DFD**
- B. Logical database design

- C. Physical database design
- D. Data model

Question No:18 (Marks:1) **Vu-Topper RM**

Name and _____ are part of the definitions of an attribute.

- A. Domain**
- B. Symbol
- C. Property
- D. Entity instance

Question No:19 (Marks:1) **Vu-Topper RM**

Which of the following most certainly implies the need for an entire table to implement?

- A. A ternary relationship**
- B. A recursive relationship
- C. An identify relationship
- D. A binary relationship

Question No:20 (Marks:1) **Vu-Topper RM**

Core of the Database Architecture is _____

- A. Internal level**
- B. External level
- C. Conceptual level
- D. ANSI SPARK

Question No:21 (Marks:1) **Vu-Topper RM**

_____ is same as equi-join with a slight difference.

- A. Natural join** **Page 159**
- B. Semi join
- C. Outer join

D. Theta join

Question No:22

(Marks:1)

Vu-Topper RM

Conceptual database design is implemented using a _____.

A. Hierarchical data model

B. Semantic data model

C. Relational data model

D. Network data model

Question No:23

(Marks:1)

Vu-Topper RM

Which constraint is generally used for efficiency purposes in the data entry process?

A. Null value

B. Integer value

C. Default value

Google

D. String value

Question No:24

(Marks:1)

Vu-Topper RM

A 3 NF relation is converted to BCNF by

A. Removing composite keys

B. Removing multivalued dependencies

C. Dependent attributes of overlapping composite keys are put in a separate relation

D. Dependent non-key attributes are put in a separate table

Question No:25

(Marks:1)

Vu-Topper RM

Each _____ of a table contains atomic/single value.

A. Cell

B. Row

C. Column

D. Record

Question No:26

(Marks:1)

Vu-Topper RM

A relation is said to be in BCNF when

- A. It has overlapping composite keys
- B. It has no composite keys
- C. It has no multivalued dependencies
- D. It has no overlapping composite keys which have related attributes**

Question No:27

(Marks:1)

Vu-Topper RM

Which one of the following is not a part of three-level architecture?

- A. External level
- B. Conceptual level
- C. Internal level
- D. Physical level**

Question No:28

(Marks:1)

Vu-Topper RM

Which of the following is INCORRECT about naming entities?

- A. Singular nouns are used
- B. Write in capitals
- C. Organization specific names can be used
- D. Always use abbreviations as they are convenient**

Question No:29

(Marks:1)

Vu-Topper RM

An instance is

- A. A particular occurrence of an entity
- B. A special type of relation
- C. An attribute of an entity
- D. Any particular entity**

Question No:30

(Marks:1)

Vu-Topper RM

_____ is an example of metadata

- A. Ali
- B. Address
- C. Person
- D. Student**

Question No:31

(Marks:1)

Vu-Topper RM

Level of data at which entities or objects exist in reality is called

- A. Real world data**
- B. Schema for real world data
- C. Meta data
- D. Data about data

Question No:32

(Marks:1)

Vu-Topper RM

There are _____ basic properties of the database relations.

- A. Four
- B. Three
- C. Six**
- D. Two

Question No:33

(Marks:1)

Vu-Topper RM

How many types of dependencies are?

- A. One
- B. Two
- C. Three**
- D. Four

Question No:34

(Marks:1)

Vu-Topper RM

In _____ join, only selected rows of a relation are made cross product with second relation.

- A. Normal
- B. Theta**
- C. Outer
- D. Semi

Question No:35

(Marks:1)

Vu-Topper RM

Which of the following is not a key?

- A. Super key
- B. Alternate key
- C. Integrity constraint key**
- D. Primary key

Question No:36

(Marks:1)

Vu-Topper RM

A collection of concepts that can be used to describe the structure of a database

- A. Database
- B. DBMS
- C. Data model**
- D. Data

Question No:37

(Marks:1)

Vu-Topper RM

Any combination of attributes with super key is _____

- A. Primary key
- B. Foreign key
- C. Super key**
- D. Candidate key

Question No:38

(Marks:1)

Vu-Topper RM

Binary relationships are those, which are established between

- A. One entity type
- B. Two entity type**
- C. Three entity type
- D. Unlimited entities

Page 140

Question No:39 (Marks:1) **Vu-Topper RM**

_____ are called participants, when enrolled in a relationship.

- A. Attributes
- B. Relations
- C. Entities**
- D. Keys

Question No:40 (Marks:1) **Vu-Topper RM**

In case of Context-level Diagram, the system is represented by

- A. One process atleast
- B. Two processes atleast
- C. One process only**
- D. Any number of processes

Question No:41 (Marks:1) **Vu-Topper RM**

Collection of raw facts is called _____.

- A. Information
- B. Object
- C. Output
- D. Data**

Question No:42 (Marks:1) **Vu-Topper RM**

A software package designed to store and manage database

- A. Database

B. DBMS

- C. Data model
- D. Data

Question No:43

(Marks:1)

Vu-Topper RM

In _____ join common attributes appear twice in the output with selected rows.

- A. Normal join
- B. Semi join
- C. Natural join

D. Equi join

Page 159

Question No:44

(Marks:1)

Vu-Topper RM

Within a table, each primary key value _____.

- A. Is a minimal super key
- B. Is always the first field in each table
- C. Must be numeric

D. Must be unique

Question No:45

(Marks:1)

Vu-Topper RM

_____ is not an operation of relational algebra.

A. Addition

- B. Union
- C. Cartesian product
- D. Set difference

Question No:46

(Marks:1)

Vu-Topper RM

Candidate keys which are not selected as primary key are called ____

- A. Secondary keys
- B. Foreign keys

C. Alternate keys

D. Composite keys

Question No:47

(Marks:1)

Vu-Topper RM

Major benefits of data sharing is:

A. Data of same applications placed at same place.

B. Data of same applications placed at different places

C. Data of different application places at same place

D. Data of different applications stored at placed place

Question No:48

(Marks:1)

Vu-Topper RM

Functional dependency between two attributes or sets of attributes i.e. Q and P is represented as _____.

A. $Q \rightarrow P$

B. $Q \ P$

C. $Q * P$

D. $Q + P$

Question No:49

(Marks:1)

Vu-Topper RM

Which of the following is not the component of Relational Data Model?

A. Integrity Constraint

B. Manipulation Language

C. Relation / Table

D. Domain Constraint

Question No:50

(Marks:1)

Vu-Topper RM

The attribute that is calculated from other attribute is called _____.

A. Derived attribute

B. Multi-valued attribute

C. Composite attribute

D. Simple attribute

Question No:51

(Marks:1)

Vu-Topper RM

Consider the two attributes “CNIC_NO” and “Registration_NO”. Both the attributes can be used for the unique identification. Now if the user selects the “CNIC_NO” as primary key, then “Registration_NO” is a _____ key.

- A. Foreign
- B. Secondary
- C. Primary

D. Alternative

Question No:52

(Marks:1)

Vu-Topper RM

Which of the following constraint is included in the definition of the table?

- A. Default value
- B. Foreign key

C. Null

Question No:53

(Marks:1)

Vu-Topper RM

The database deals with large amount of data. This property is called

A. Database design

B. Scalability

C. Concurrency

D. Robustness

Question No:54

(Marks:1)

Vu-Topper RM

Which one of the following is NOT a characteristic of meta data?

- A. Data about data
- B. Describes a data dictionary
- C. Self-describing

D. Includes user data

Question No:55

(Marks:1)

Vu-Topper RM

Theta join is denoted mathematically as _____.

- A. $R \times S$
- B. $R \bowtie X$
- C. $R \bowtie S$**
- D. $R \bowtie RS$

Question No:56

(Marks:1)

Vu-Topper RM

In cross reference matrix transitions are specified on _____ and database objects are specified on _____.

- A. Y axis, X axis
- B. X axis, Y axis
- C. X axis, X axis
- D. Y axis, Y axis**

Question No:57

(Marks:1)

Vu-Topper RM

Each component of DBMS performs _____ functions.

- A. Similar
- B. Different**
- C. Identical
- D. Computational

Question No:58

(Marks:1)

Vu-Topper RM

Which of the following data model is not record based?

- A. Hierarchical Data Model
- B. Network Data model
- C. Semantic Data model**
- D. Relational Data model

Question No:59

(Marks:1)

Vu-Topper RM

The basic purpose of diamond in ER diagram is to show the _____.

- A. Attributes
- B. Relationships**
- C. Composite attribute
- D. Entity set

Question No:60

(Marks:1)

Vu-Topper RM

Which of the following tool is used to design conceptual database design?

- A. SQL
- B. MS Access
- C. Oracle
- D. This model is independent of any tool**

Question No:61

(Marks:1)

Vu-Topper RM

In “one to many” cardinality one instance of a relation is mapped with _____.

- A. Many instances of second entity type**
- B. One instance of second entity type
- C. Primary key of second relation
- D. Foreign key of second relation

Question No:62

(Marks:1)

Vu-Topper RM

Cross reference matrix is developed at the _____ stage of the database.

- A. Analysis
- B. Designing**
- C. Implementation
- D. Application

Question No:63

(Marks:1)

Vu-Topper RM

The population of the data of the organization for which the database is created is called the__ of the database.

A. Extension

B. Intension

C. Model

D. Schema

Question No:64

(Marks:1)

Vu-Topper RM

User rights information is stored in

A. Physical database

B. Catalog

C. Logical database

D. Buffer

Question No:65

(Marks:1)

Vu-Topper RM

Logical data independency provides independency to change __ model.

A. External

B. Logical

C. Conceptual

D. Internal

Question No:66

(Marks:1)

Vu-Topper RM

In natural join the common attribute in the output table appears ____.

A. Twice

B. Three times

C. Four times

D. Once

Question No:67

(Marks:1)

Vu-Topper RM

Which levels are mostly used for detailed DFD?

- A. Level-0, Level-1**
- B. Level-1, Level-2
- C. Level-2, Level-3
- D. Level-3, Level-4

Question No:68

(Marks:1)

Vu-Topper RM

By default, a non-key attribute in a relation can have _____ value.

- A. Binary
- B. Null**
- C. Character
- D. Integer

Question No:69

(Marks:1)

Vu-Topper RM

The three levels architecture is useful for _____.

- A. Arranging the data in an organized manner
- B. Hiding the details of internal systems**
- C. Breaking the data access restriction
- D. Storing definitions of the structures

Question No:70

(Marks:1)

Vu-Topper RM

With the help of _____ technique data values with the smaller sized codes can further reduce the space needed by the data for storage in the database.

- A. Compression**
- B. Expansions
- C. Negation
- D. Extension

Question No:71

(Marks:1)

Vu-Topper RM

If an entity is linked with itself, than it is called _____ relationship.

- A. Binary
- B. Ternary
- C. Nary

D. Recursive

Question No:72

(Marks:1)

Vu-Topper RM

Duplication of data in controlled redundancy is controlled and _____.

- A. Deliberate**
- B. Necessary
- C. Precise
- D. Unintentional

Question No:73

(Marks:1)

Vu-Topper RM

Teleprocessing is a sub-type of _____.

- A. Single user database
- B. Multi-user database**
- C. File server
- D. Client server

Question No:74

(Marks:1)

Vu-Topper RM

In an ERD, the focus is on the _____ and the relationships between them.

- A. Attributes
- B. Entities**
- C. Keys
- D. Indexes

Question No:75

(Marks:1)

Vu-Topper RM

The most widely used conceptual model is the _____ model.

A. Implementation

B. ER

C. Object oriented

D. Internal

Question No:76

(Marks:1)

Vu-Topper RM

Student and book are two entities, what is the cardinality between the two?

A. Many to one

B. One to many

C. Many to many

D. One to one

Question No:77

(Marks:1)

Vu-Topper RM

RDM is a simple there is just one structure and that is _____.

A. A relation or a table

B. E-R model

C. Attributes

D. Data model

Question No:78

(Marks:1)

Vu-Topper RM

A description on a particular collection of data using the given data model.

A. Database

B. Relation

C. Schema

D. None

Question No:79

(Marks:1)

Vu-Topper RM

Consider thy key “CNIC, Name” and choose the best option that describes the key most effectively.

- A. The given key is a super key and alternate key.
- B. The given key is not a super key but a candidate key.
- C. The given key is a super key and candidate key as well.**
- D. The given key is a super key but not a candidate key.

Question No:80

(Marks:1)

Vu-Topper RM

Normalization is a process of restricting a relation to

- A. Minimize duplication of data in a database**
- B. Maximize duplication of data to ensure reliability
- C. Make it of uniform size
- D. Allow addition of data

Question No:81

(Marks:1)

Vu-Topper RM

Unary relationship involves a single entity it is also called _____.

- A. One to one relationship
- B. One to many relationship
- C. Many to many relationship
- D. Recursive relationship**

Question No:82

(Marks:1)

Vu-Topper RM

Which of the following is a part of a DFD but not included in the ERD?

- A. The attribute having a single instance
- B. The external entity having a single instance**
- C. The relationship having a single instance
- D. The role having a single instance

Question No:83

(Marks:1)

Vu-Topper RM

The database management system (DBMS) is used to

- A. Store the data
- B. Access the data
- C. Manage its users

D. All of above

Question No:84

(Marks:1)

Vu-Topper RM

In cross reference matrix attributes are mentioned on _____ and reports are mentioned on _____.

- A. Y axis, X axis
- B. Y axis, Z axis
- C. X axis, Y axis**
- D. X axis, Z axis

Question No:85

(Marks:1)

Vu-Topper RM

A table can be logically connected to another table by defining a ____.

- A. Hyper link
- B. Common attribute
- C. Primary key**
- D. Super key

Question No:86

(Marks:1)

Vu-Topper RM

Data Redundancy means

- A. Security of data
- B. Duplication of data**
- C. Management of data
- D. Recovery of data

Question No:87

(Marks:1)

Vu-Topper RM

Which of the following is a type of dependency?

- A. DBMS
- B. ERD
- C. DFD
- D. Referential**

Question No:88

(Marks:1)

Vu-Topper RM

In your opinion, why relational database is widely acceptable?

- A. Due to its complexity
- B. Due to its approach
- C. Due to its dependencies**
- D. Due to its strength

Question No:89

(Marks:1)

Vu-Topper RM

_____ is the first comprehensive complete database design.

- A. Logical database design
- B. Relational database design
- C. Conceptual database design**
- D. Hierarchical database design

Question No:90

(Marks:1)

Vu-Topper RM

How data security can be assured in the database?

- A. By hiding data from all
- B. Through concurrent access of users
- C. By asking users not to share things
- D. Implementing encryption algorithms**

Question No:91

(Marks:1)

Vu-Topper RM

The attributes whose value is not stored in a database is known as

_____ attribute.

- A. Stored
- B. Single value
- C. Multi value
- D. Derived**

Question No:92

(Marks:1)

Vu-Topper RM

Logical database design, like conceptual database design is our _____

- A. Data model
- B. Weak entity set
- C. Strong entity set
- D. Database design**

Question No:93

(Marks:1)

Vu-Topper RM

If a single instance of “student” is associated with the many instances of the “subjects” entity, then the relationship between them is:

- A. One to one
- B. One to many**
- C. Many to many
- D. Many to one

Question No:94

(Marks:1)

Vu-Topper RM

The conceptual database design is drawn through _____.

- A. Data model
- B. ER model**
- C. Database design
- D. Entity set

Question No:95

(Marks:1)

Vu-Topper RM

A relational database is

- A. One that consist of two or more tables
- B. A database that is able to process tables, queries, forms, reports and macros**
- C. One that consists of two or more tables that are joined in some way
- D. The same as a flat file database

Question No:96

(Marks:1)

Vu-Topper RM

Database is a computerized representation of any organization's flow of ___ and storage of_.

- A. Data, information
- B. Details, data
- C. Data, details

D. Information, data

Question No:97

(Marks:1)

Vu-Topper RM

In which stage of the database development process logical design is created?

- A. Requirement analysis
- B. Database design
- C. Physical design

D. Implementation

Question No:98

(Marks:1)

Vu-Topper RM

Which of the following is NOT an entity?

- A. Employee
- B. Hobby
- C. Student

D. Playground

Question No:99

(Marks:1)

Vu-Topper RM

After moving the determined columns from the original table to the new table while converting to 2NF, the determinate becomes the _____ of the new table.

A. Primary key

- B. Foreign key
- C. Secondary key

D. Composite key

Question No:100

(Marks:1)

Vu-Topper RM

The select operation works horizontally on the table, on the other hand the _____ operates on a single table vertically.

A. Binary operator

B. Project operator

Page 150

C. Join operator

D. Select operator

Question No:101

(Marks:1)

Vu-Topper RM

Free standing data dictionary is created by

A. DFD

B. Database

C. CASE tools

D. Cross reference matrix

Question No:102

(Marks:1)

Vu-Topper RM

A patient can be an outdoor or indoor. Analyze this statement and tell what type of constraint will be applied on patient?

A. Total completeness

B. Partial completeness

C. Total disjoint

D. Partial disjoint

Question No:103

(Marks:1)

Vu-Topper RM

If $A \rightarrow B$ and $A \rightarrow C$, then $A \rightarrow BC$. The inference Rule applies is:

A. Union

Page 166

B. Decomposition

C. Augmentation

D. Reflexivity

Question No:104

(Marks:1)

Vu-Topper RM

Which of the following is the correct abbreviation of ERD?

A. Entity relationship diagram

B. Entity relation diagram

C. Entity reality diagram

D. Entity real distance

Question No:105

(Marks:1)

Vu-Topper RM

Database relation is also represented in a two dimensional structure called _____

A. Row

B. Table

C. Entity

D. Column

Question No:106

(Marks:1)

Vu-Topper RM

Data about data is metadata

A. True

B. False

Question No:107

(Marks:1)

Vu-Topper RM

Which of the following describes the job of a database administrator?

A. Development, implementation operation of the physical database

B. Creation of the system catalog

C. Monitoring and controlling database security and authorization: setting up controls to ensure the quality and integrity of data

D. All of the above

Question No:108 (Marks:1)

Vu-Topper RM

Each table must have a _____ key.

A. Primary

B. Secondary

C. Logical

D. Foreign

Question No:109 (Marks:1)

Vu-Topper RM

A relational database system is based on the concept(s) of:

A. A network of data records

B. Nested tables

C. Tables, row and columns

D. A tree-like structure of data

Question No:110 (Marks:1)

Vu-Topper RM

$A \rightarrow BC$ and $A \rightarrow B$, then $A \rightarrow C$ follow _____ inference rule.

A. Augmentation

B. Transitivity

C. Projectivity **Page 166**

D. Additivity

Question No:111 (Marks:1)

Vu-Topper RM

Suppose, we have two entities “shape” and “triangle”, then which of the following is a correct statement?

A. Shape is a super type entity and triangle is a sub type entity

B. Shape is a sub type entity and triangle is a super type entity

C. Shape and triangle both are super type entities

D. Shape and triangle both are sub type entities

Question No:112 (Marks:1)

Vu-Topper RM

The entity that is NOT dependent on any other entity for its existence is known as__ entity.

- A. Weak
- B. Strong**
- C. Derived
- D. Dependent

Question No:113

(Marks:1)

Vu-Topper RM

In cross reference matrix attributes are specified on _____

- A. X axis**
- B. Y axis
- C. Z axis
- D. None of the above

Question No:114

(Marks:1)

Vu-Topper RM

Which of the following clarify the semantics of a relationship?

- A. Entity
- B. Roles**
- C. Relationship set
- D. Participants

Question No:115

(Marks:1)

Vu-Topper RM

How many types of cardinalities is specified about relationship?

- A. Two
- B. One
- C. Three
- D. Four**

Question No:116

(Marks:1)

Vu-Topper RM

Which of the following is NOT a component of a DFD?

- A. Dataflow

- B. Datastore
- C. External entities

D. Relationship between external entities

Question No:117 (Marks:1) **Vu-Topper RM**

Which of the following provides us the facility to add properties of one entity to another entity automatically?

- A. Abstraction
- B. Encapsulation
- C. Inheritance**
- D. Dependencies

Question No:118 (Marks:1) **Vu-Topper RM**

If there is more than one relationship between two entities and we mentioned role on the relationship link, then it is called:

- A. Unary relationship
- B. Binary relationships
- C. Ternary relationships
- D. Multiple relationships**

Question No:119 (Marks:1) **Vu-Topper RM**

Which one of the following is not an advantage of DBMS?

- A. Data consistency
- B. Recovery procedure is difficult**
- C. Faster development of new applications
- D. Better backup and recovery procedures

Question No:120 (Marks:1) **Vu-Topper RM**

In many to many relationship a third table is created for the relationship, which is also called as _____.

- A. Binary relation
- B. Associative entity type**
- C. Unary relationship
- D. Composite attributes

Question No:121

(Marks:1)

Vu-Topper RM

When one entity instance of another entity for its existence, then it is called _____

- A. Existence dependency**
- B. Identifier dependency
- C. Referential dependency
- D. Acceptance dependency

Question No:122

(Marks:1)

Vu-Topper RM

Relational data model is widely accepted due to its mathematically proven foundation and its _____

- A. Complexity
- B. Simplicity**
- C. Hierarchical structure
- D. Traditional structure

Question No:123

(Marks:1)

Vu-Topper RM

If an entity “motor cycle” is associated with at most one “driver”, then the relationship between these two entities is:

- A. One to one**
- B. One to many
- C. Many to many
- D. Many to one

Question No:124

(Marks:1)

Vu-Topper RM

Database application is a program which is used for performing certain operations such as-----

- A. Insertion of data
- B. Extraction of data
- C. Updating the data
- D. All of above**

Question No:125

(Marks:1)

Vu-Topper RM

Creating the relationships between new tables and their predecessors through the use of foreign keys is general requirements of _____

- A. First normal form
- B. Second normal form**
- C. Third normal form
- D. Fourth normal form

Question No:126

(Marks:1)

Vu-Topper RM

In _____ the domains of attributes of a relation are atomic, that is they consist of single units that cannot be broken down further.

A. First normal form

Page 167

- B. Second normal form
- C. Third normal form
- D. Augmentation

Question No:127

(Marks:1)

Vu-Topper RM

Atomicity is a feature of _____.

- A. 1NF**
- B. 2NF
- C. 3NF
- D. BCNF

Question No:128

(Marks:1)

Vu-Topper RM

The _____ can see entire information structure of the database.

- A. BA**
- B. DBTG
- C. Database user
- D. External viewer

Question No:129

(Marks:1)

Vu-Topper RM

The attribute whose value is not stored in a database is known as _____ attribute.

- A. Stored
- B. Single value
- C. Multi value
- D. Derived**

Question No:130

(Marks:1)

Vu-Topper RM

_____ are the structure defined for placing data in the attributes while designing physical design of database.

- A. Objects
- B. Variables
- C. Attributes
- D. Data types**

Question No:131

(Marks:1)

Vu-Topper RM

Suppose a relation has five columns and ten rows, select the correct option to identify cardinality of relation.

- A. Five
- B. Ten**
- C. Fifteen

D. Twenty

Question No:132

(Marks:1)

Vu-Topper RM

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. Recovery service**
- D. Authorization service

Question No:133

(Marks:1)

Vu-Topper RM

The maximum PL/SQL size of data type "VARCHAR2" in DBMS is _____ bytes

- A. 42767
- B. 52767
- C. 32767**
- D. 28767

Question No:134

(Marks:1)

Vu-Topper RM

_____ is state of database where a "course" cannot be inserted in the table, because this course has not been registered to any "student".

- A. Insertion anomaly**
- B. Deletion anomaly
- C. Updation anomaly
- D. Redundancy

Question No:135

(Marks:1)

Vu-Topper RM

The maximum PL/SQL size of data type "BLOB" in DBMS is _____

- A. 4 gigabytes**
- B. 8 gigabytes

- C. 10 gigabytes
- D. 12 gigabytes

Question No:136 (Marks:1) **Vu-Topper RM**

_____ states that in a relation no attributes of a primary key (PK) can have a null value.

- A. Referential integrity constraint
- B. Null constraint
- C. Domain constraint
- D. Entity integrity constraint**

Question No:137 (Marks:1) **Vu-Topper RM**

A database state where deletion of the information about the student record deletes the course information as well is called _____.

- A. Insertion anomaly
- B. Updation anomaly
- C. Redundancy
- D. Deletion anomaly**

Question No:138 (Marks:1) **Vu-Topper RM**

An entity type is

- A. Defined when the database is actually constructed
- B. A specific type such as an integer, text, date, logical etc.
- C. A coherent set of similar objects that we want to store data on (e.g. STUDENTS, COURSE, CAR)**

Question No:139 (Marks:1) **Vu-Topper RM**

Defined by the database designer

“select” and “project” are the examples of _____

- A. Unary operation**

- B. Binary operation
- C. Ternary operation
- D. Nary operation

Question No:140

(Marks:1)

Vu-Topper RM

External scheme evolves as user needs are _____ over the time.

- A. Ends
- B. Modified
- C. Switch**
- D. Stable

Question No:141

(Marks:1)

Vu-Topper RM

An attribute that is the collection of some other attribute(s) is known as _____ attributes.

- A. Multi-valued
- B. Single-valued
- C. No-valued
- D. Composite**

Question No:142

(Marks:1)

Vu-Topper RM

Which of the following is correct regarding Dataflow diagram?

- A. Single DFD is required to represent a system
- B. The dataflow must be bidirectional
- C. Created at increasing levels of detail**

Question No:143

(Marks:1)

Vu-Topper RM

Used to represent the relationships among the external entities_ are those attributes that are a combination of two or more than two attributes.

- A. Default value

- B. Null value
- C. Primary key
- D. Composite attributes**

Question No:144 (Marks:1) **Vu-Topper RM**

Controlling redundancy in a database management system DOES NOT help to

- A. avoid duplication
- B. avoid unnecessary wastage of storage space
- C. avoid unauthorized access to data**
- D. avoid inconsistency among data

Question No:145 (Marks:1) **Vu-Topper RM**

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

Question No:146 (Marks:1) **Vu-Topper RM**

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

Question No:147 (Marks:1) **Vu-Topper RM**

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

Question No:148 (Marks:1) **Vu-Topper RM**

For a third normal form we concentrate on relations with one _____ key, and we eliminate transitive dependencies

- A. Candidate**
- B. Composite
- C. Super key
- D. Primary key

Question No:149 (Marks:1) **Vu-Topper RM**

The entity relationship diagram is used to graphically represent the _____ database model.

- A. Condensed
- B. Physical
- C. Logical
- D. Conceptual**

Question No:150 (Marks:1) **Vu-Topper RM**

The _____ determines that the link between two entities is optional or mandatory.

- A. Maximum cardinality
- B. Minimum cardinality**
- C. Maximum degree
- D. Minimum degree

Question No:151 (Marks:1) **Vu-Topper RM**

Select the most appropriate statement. Which of the following data model is used to design logical database design?

- A. Relational**
- B. Hierarchal
- C. object oriented
- D. Any model can be used

Question No:152

(Marks:1)

Vu-Topper RM

The process of defining one or more subtypes of a super type and forming relationships is known as

Aggregation.

Generalization

Specialization

Google

Selecting classes.

Question No:153

(Marks:1)

Vu-Topper RM

_____ are used by database administrator in situations where we have large number of records and wastage of small amount of space in each record can lead to loss of huge amount of data storage space.

Code

Question No:154

(Marks:1)

Vu-Topper RM

An attribute in a relation is foreign key If the _____ key from one relation is used as an attribute in that relation.

Primary

Question No:155

(Marks:1)

Vu-Topper RM

in data flow diagram which of the following operator is used, when data flows from a source process to one of the mentioned sinks?

Ring Sum Operator

Question No:156

(Marks:1)

Vu-Topper RM

The _____ rule specifies that an entity can be a member of only one subtype at a time.

Disjoint

Question No:157

(Marks:1)

Vu-Topper RM

In relational algebra, which of the following Greek is used to represent the project operator?

Π (PI)

Question No:158

(Marks:1)

Vu-Topper RM

In three level architecture of the database, which views is called community views of the database?

Conceptual view

Question No:159

(Marks:1)

Vu-Topper RM

Which of the following normal forms deals multivalued dependency?

4NF

Question No:160

(Marks:1)

Vu-Topper RM

While mapping _____ relationship, primary key of the entity type against one side of relationship will be included in the entity type on the many sides of the relationship as foreign key.

One to many

Question No:161

(Marks:1)

Vu-Topper RM

In data flow diagram _____ symbol is used to represents data flows.

Arrow

Google

Circle

Square
Diamond

Question No:162 (Marks:1) **Vu-Topper RM**

In the below entity type which attribute can work as an alternate key?
Employee (Reg# Primary key, Name, CNIC, designation, address, phone)
CNIC

Question No:163 (Marks:1) **Vu-Topper RM**

From the following who is responsible for proper working of the database and DBMS?

Database administrator

Question No:164 (Marks:1) **Vu-Topper RM**

Suppose that "Program" is an entity which represents different courses are being offered by an institute, like MCS, BCS etc. Following are the major attributes of this entity.

Identify the attribute which can be used as primary key.

Max-Duration

Program-Code

Program-level

No-of-Semesters

Question No:165 (Marks:1) **Vu-Topper RM**

The following is an of _____ inference rule.

If stId \rightarrow prName and prName \rightarrow credits then stId \rightarrow credits

A. Augmentation

B. Transitivity

C. Projectivity

D. Additivity

Page 166

Question No:166 (Marks:1) **Vu-Topper RM**

Which of the following is the example of a weak entity?

The tire can exist without being attached to the car

Question No:167 (Marks:1) **Vu-Topper RM**

In Relational Data Model, the _____ of a relation is the number of columns in that relation

Degree

Question No:168 (Marks:1) **Vu-Topper RM**

Which of the following normal form deals with possible loss less decompositions?

5NF

Question No:169 (Marks:1) **Vu-Topper RM**

Suppose we have a list of bank customers which availed loan facility from different branches of a bank. If we want to get a list of all customers and the amount of the loans excluding branch name. Which of the following operation allows us to generate this relation?

Union

Question No:170 (Marks:1) **Vu-Topper RM**

Which of the following provides us data independency?

3-Level Architecture

Question No:171 (Marks:1) **Vu-Topper RM**

Cross reference matrix is a tool available in the data dictionary, which helps us in finding _____.

Entities of the database and their associations

Question No:172 (Marks:1) **Vu-Topper RM**

Conceptual database design, expressed in E-R data model can be implemented using any _____.

Database Management System (DBMS)

Question No:173 (Marks:1) **Vu-Topper RM**

Which of the following might be represented with a single-valued attribute?

Computer's processor speed

Question No:174 (Marks:1) **Vu-Topper RM**

Which of the following is a Unary operation?

Project

Question No:175 (Marks:1) **Vu-Topper RM**

Which of the following data model has the following components?

Relational

Question No:176 (Marks:1) **Vu-Topper RM**

Which of the following Greek is used to represent the select operation?

σ

Question No:177 (Marks:1) **Vu-Topper RM**

Data about data is called metadata.

True

False

Question No:178 (Marks:1) **Vu-Topper RM**

Normalization of database is used to _____.

Eliminate redundancy

Question No:179 (Marks:1) **Vu-Topper RM**

In student entity which of the following is the best example of multivalued attribute?

Email address

Question No:180

(Marks:1)

Vu-Topper RM

In which normal form, we convert composite attributes into individual attributes?

1NF

Question No:181

(Marks:1)

Vu-Topper RM

Which of the following tool is used to graphically represent the components and design of the system?

DFD

Question No:182

(Marks:1)

Vu-Topper RM

Data type "BLOB" in database management system stands for ____.

Binary Large Object

Question No:183

(Marks:1)

Vu-Topper RM

In a three level DBMS architecture, the _____ level interacts directly with the users.

External

Question No:184

(Marks:1)

Vu-Topper RM

In the Database System _____ provides many features to ensure the data integrity.

Database Management System (DBMS)

Question No:185

(Marks:1)

Vu-Topper RM

_____ of the Database is most difficult to change when a database is created.

Extension

Question No:186 (Marks:1) **Vu-Topper RM**

In Database development process, which phase involves designing of any new application for the enhancement of the system?

Maintenance phase

Question No:187 (Marks:1) **Vu-Topper RM**

An attribute of an entity is associated with another attribute of the same entity is called:

Recursive relationship

Question No:188 (Marks:1) **Vu-Topper RM**

Relational Data model is created in the _____ phase.

Analysis

Question No:189 (Marks:1) **Vu-Topper RM**

Database system saves lots of efforts and finances, this advantage provides _____.

Time saving structure

Question No:190 (Marks:1) **Vu-Topper RM**

Data inconsistency leads to a number of a problems such as _____.

Loss of information and incorrect results

Question No:191 (Marks:1) **Vu-Topper RM**

A row of a table represents a _____, whereas the column of the table represents the _____.

Record, attribute

Question No:192 (Marks:1) **Vu-Topper RM**

Every primary key (PK) will be a candidate key and every candidate key will be a _____.

Super key

Question No:193 (Marks:1) **Vu-Topper RM**

If we want to include attributes from two different relations, which of the following operations will be used?

Union

Question No:194 (Marks:1) **Vu-Topper RM**

When have two entities "Person" and "Doctor. Which of all is best suitable type of relationship between the mentioned entities?

Sub type

Question No:195 (Marks:1) **Vu-Topper RM**

The relationship between department to employee is _____.

One to many

One to one

Many to one

Many to many

Question No:196 (Marks:1) **Vu-Topper RM**

The attribute HOBBY can have more than one values in ERD. The HOBBY is a-----attribute.

Derived

Composite

Multi valued

Single-valued

Question No:197 (Marks:1) **Vu-Topper RM**

_____ is used to find out that what values or attributes will appear in which reports, for this purpose the major item names are written in the row wise order and the reports which will be generated will be written in column wise order.

Context Diagram

Data Flow Diagram

Cross Reference Matrix **Page 115**

Entity Relationship Diagram

Question No:198 **(Marks:1)** **Vu-Topper RM**

Which of the following constraint states that in a relation, no attribute of a primary key (PK) can have null value?

Entity Integrity Constraint

Question No:199 **(Marks:1)** **Vu-Topper RM**

Which of the following constraint means that if we do not give any value to any particular attribute, it will be given a certain value?

Default Value

Question No:200 **(Marks:1)** **Vu-Topper RM**

_____ are those languages in which what to do and how to do on the database is required.

SQL

Procedural **Page 147**

Non-procedural

Relational calculus

Question No:201 **(Marks:1)** **Vu-Topper RM**

The primary key of EMP table is _____ whereas foreign key of EMP table is _____.

depId, empId

empId, depId

depId, empName

empName, depId

Question No:202

(Marks:1)

Vu-Topper RM

Which of the following is not the component of Relational Data Model?

Manipulation Language

Question No:203

(Marks:1)

Vu-Topper RM

_____ are those attributes that are a combination of two or more than two attributes.

Composite attributes

Question No:204

(Marks:1)

Vu-Topper RM

Which of the following Greek letter is used to denote the select operation?

Greek sigma ()

Question No:205

(Marks:1)

Vu-Topper RM

Which of the following is the example of a strong entity?

Ahmad account of ABC bank has no existence if the ABC bank doesn't exist anymore

Question No:206

(Marks:1)

Vu-Topper RM

Major benefit of data sharing is _____.

Different applications need not to be stored repeatedly Page 15

Question No:207 (Marks:1) **Vu-Topper RM**

A relationship that involves three entities called _____.

Ternary relationship

Question No:208 (Marks:1) **Vu-Topper RM**

Once the data has been transported to the physical level it is then managed by the ____

System analysis

Question No:209 (Marks:1) **Vu-Topper RM**

Which of the following is not a part of the Database Application Development Process?

Validation

Question No:210 (Marks:1) **Vu-Topper RM**

Changes at ____ levels of database architecture need ____ levels of user's attention.

Different, different **Page 34**

Question No:211 (Marks:1) **Vu-Topper RM**

The total participation by entities is represented in E-R diagram as

Double lines **Google**

Question No:212 (Marks:1) **Vu-Topper RM**

A key which consists of two or more attributes is called_____.

Composite key

Question No:213 (Marks:1) **Vu-Topper RM**

The Entity Relationship Model consists of the following major constructs_____.

Entity, Attribute and relationship

Question No:214 (Marks:1) **Vu-Topper RM**

Which model operates at the lowest level of abstraction?

The physical model **Google**

Question No:215 (Marks:1) **Vu-Topper RM**

Candidate keys, which are not selected as primary key are called_____.

Alternate key. **Google**

Question No:216 (Marks:1) **Vu-Topper RM**

In which phase of Database development process, specific Database management system (DBMS) is chosen?

Logical data base design **Google**

Question No:217 (Marks:1) **Vu-Topper RM**

Entities enrolled in a relationship are called its_____.

Participants

Question No:218 (Marks:1) **Vu-Topper RM**

Which of the following is correct about Database modelling?

Process of creating the logical structure of the database

Question No:219 (Marks:1) **Vu-Topper RM**

In a three-level DBMS architecture, the _____ level interacts directly with the users.

External

Question No:220 (Marks:1) **Vu-Topper RM**

Which model operates at the lowest level of abstraction?

Internal

Question No:221

(Marks:1)

Vu-Topper RM

From the following, who is responsible for proper working of the database and DBMS?

Database administrator

Google

Question No:222

(Marks:1)

Vu-Topper RM

RDM is simple there is just one structure and that is_____.

Relation or a table **Google**

Question No:223

(Marks:1)

Vu-Topper RM

A _____ is used to combine rows from two or more tables, based on a related column between them.

Joins **Google.**

The outcome of _____ phase is the conceptual database design, which is drawn through E-R model.

Logical

Physical

Analysis **Page 122**

Conclusion

Which of the following is a completeness constraint?

Total generalization Constraint

Hybrid completeness Constraint

Partial Completeness Constraint

Partial generalization Constraint

If $A \rightarrow B$ and $CB \rightarrow D$, then $AC \rightarrow D$. 1. The above rule follows _____ inference rule.?

Additivity

Projectivity

Decomposition

Pseudo transitivity

Page 166

If we have $A \rightarrow B$ then $AC \rightarrow BC$. The inference Rule applies is:

Union

Decomposition

Augmentation

Page 166

Reflexivity

If B is a subset of A , then $A \rightarrow B$. This also implies that $A \rightarrow A$ always holds.

The inference Rule applies is:

Additivity

Projectivity

Decomposition

Reflexivity

Page 166

Which of the following might be represented with a multivalued attribute?

Book title

Class location

Person's name

Bank account balance

If an instance of an entity can exist without being linked with an instance of another entity then the minimum cardinality has to be _____.

Zero

One **Page 142**

Two

Compulsory

The _____ is performed to select certain rows or tuples of a table, so it performs its action on the table horizontally.

Binary operator

Project operator

Join operator

Select operator **Page 149**

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