BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Diploma in Electronics & Communication Engineering

Course Name – Data Base Management System

Course Code - DECE304

Semester / Year - Semester III

Time allotted : 85 Minutes Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 70=70

1. *(Answer any Seventy)*

(i) The data model which describes how the data is actually stored is

a) Internal model b) External model

c) Logical model d) None of these

(ii) The schema for hierarchical database is

a) A tree b) A graph

c) A B-tree d) None of these

(iii) DBA stands for

a) Data Bank Access b) Database Access

c) Data Bank Administration d) Database Administrator

(iv) Which of following are the properties of entities?

a) Groups b) Table

c) Attributes d) Switchboards

(v) Which of the following is the structure of the Database?

a) Table b) Schema

c) Relation d) None of these

(vi) Options are:The minimal set of super key is called

a) Primary Key
b) Secondary key
c) Foreign key
d) Candidate Key

(vii) Options are:Which database level is closest to the users?

a) External
b) Internal
c) Physical
d) Conceptual

(viii) _____ is a classical approach to database design?

a) Bottom-up approach
b) Top-down approach
c) Left-right approach
d) Right-left approach

(ix) Options are:A lock that allows concurrent transactions to access different rows of the same table is known as a

a) Multi-query
b) Super query
c) Sub query
d) Master query

(x) which of the following hardware component is the most important to the operation of database management system?

a) High resolution video
b) Printer
c) Plotter
d) High speed, large capacity disk

(xi) The term attribute refers to a _____ of a table.

a) Record
b) Column
c) Tuple
d) Key

(xii) Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time

a) Instance,Schema
b) Relation,Schema
c) Relation,Domain
d) Schema,Instance

(xiii) Consider attributes ID, CITY and NAME. Which one of this can be considered as a super key?

a) NAME
b) ID
c) CITY
d) CITY, ID

(xiv) The subset of a super key is a candidate key under what condition?

a) No proper subset is a super key
b) All subsets are super keys
c) Subset is a super key
d) Each subset is a super key

(xv) The _____ is the one in which the primary key of one relation is used as a normal attribute in another relation

a) Referential relation
b) Referencing relation
c) Referenced relation
d) Referred relation

(xvi) Which one of the following is used to define the structure of the relation, deleting relations and relating schemas?

a) DML(Data Manipulation Language)
b) DDL(Data Definition Language
c) Query
d) Relational Schema

(xvii) The basic data type char(n) is a _____ length character string and varchar(n) is _____ length character.

a) Fixed, equal
b) Equal, variable
c) Fixed, variable
d) Variable, equal

(xviii) An attribute A of datatype varchar(20) has the value “Avi”. The attribute B of datatype char(20) has value ”Reed”. Here attribute A has ____ spaces and attribute B has ____ spaces

a) 3, 20
b) 20, 4
c) 20, 20
d) 3, 4

(xix) Updates that violate _____ are disallowed.

a) Integrity constraints
b) Transaction control
c) Authorization
d) DDL constraints

(xx) The _____ clause allows us to select only those rows in the result relation of the ____ clause that satisfy a specified predicate.

a) Where, from
b) From, select
c) Select, from
d) From, where

(xxi) An _____ is a set of entities of the same type that share the same properties, or attributes

a) Entity set
b) Attribute set
c) Relation set
d) Entity model

(xxii) The descriptive property possessed by each entity set is _____

a) Entity
b) Attribute
c) Relation
d) Model

(xxiii) The query given below will not give an error. Which one of the following has to be replaced to get the desired output? SELECT ID, name, dept name, salary * 1.1 WHERE instructor;

a) Salary*1.1
b) ID
c) Where
d) Instructor

(xxiv) Which of the following statements contains an error?

a) Select * from emp where empid = 10003;
b) Select empid from emp where empid = 10006;
c) Select empid from emp
d) Select empid where empid = 1009 and lastname = ‘GELLER’

(xxv) In the given query which of the keyword has to be inserted?

a) Table
b) Values
c) Relation
d) Field

(xxvi) The entity relationship set is represented in E-R diagram as

a) Double diamonds
b) Undivided rectangles
c) Dashed lines
d) Diamond

(xxvii) The Rectangles divided into two parts represents

a) Entity set
b) Relationship set
c) Attributes of a relationship set
d) Primary key

(xxviii) We indicate roles in E-R diagrams by labeling the lines that connect _____ to _____

a) Diamond , diamond
b) Rectangle, diamond
c) Rectangle, rectangle
d) Diamond, rectangle

(xxix) Weak entity set is represented as

a) Underline
b) Double line
c) Double diamond
d) Double rectangle

(xxx) What term is used to refer to a specific record in your music database; for instance; information stored about a specific album

a) Relation
b) Instance
c) Table
d) Column

(xxxi) Which relationship is used to represent a specialization entity?

a) ISA
b) AIS
c) ONIS
d) WHOIS

(xxxii) There are similarities between the instructor entity set and the secretary entity set in the sense that they have several attributes that are conceptually the same across the two entity sets: namely, the identifier, name, and salary attributes. This process is called

a) Commonality
b) Specialization
c) Generalization
d) Similarity

(xxxiii) If an entity set is a lower-level entity set in more than one ISA relationship, then the entity set has

a) Hierarchy
b) Multilevel inheritance
c) Single inheritance
d) Multiple inheritance

(xxxiv) The completeness constraint may be one of the following: Total generalization or specialization, Partial generalization or specialization. Which is the default

a) Total
b) Partial
c) Should be specified
d) Cannot be determined

(xxxv) Which of the following is another name for a weak entity?

a) Child
b) Owner
c) Dominant
d) All of these

(xxxvi) A table on the many side of a one to many or many to many relationship must:

a) Be in Second Normal Form (2NF)
b) Be in Third Normal Form (3NF
c) Have a single attribute key
d) Have a composite key

(xxxvii) Which is a bottom-up approach to database design that design by examining the relationship between attributes

a) Functional dependency
b) Database modeling
c) Normalization
d) Decomposition

(xxxviii) Which forms has a relation that possesses data about an individual entity:

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

(xxxix) Which forms are based on the concept of functional dependency:

a) 1NF
b) 2NF
c) 3NF
d) 4NF

(xl) Which of the following is not Armstrong's Axiom?

a) Reflexivity rule
b) Transitivity rule
c) Pseudotransitivity rule
d) Augmentation rule

(xli) The normal form which satisfies multivalued dependencies and which is in BCNF is

a) 4 NF
b) 3 NF
c) 2 NF
d) All of these

(xlii) Which of the following is a tuple-generating dependencies?

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

(xliii) Which of the normal form is based on multivalued dependencies?

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

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

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

(xlv) In which of the following, a separate schema is created consisting of that attribute and the primary key of the entity set

a) A many-to-many relationship set
b) A multivalued attribute of an entity set
c) A one-to-many relationship set
d) None of the mentioned

(xlvi) In 2NF

a) No functional dependencies (FDs) exist
b) No multivalued dependencies (MVDs) exist
c) No partial FDs exist
d) None of these

(xlvii) R (A, B, C, D) is a relation. Which of the following does not have a lossless join dependency preserving BCNF decomposition?

a) AàB, BàCD
b) AàB, BàC, CàD
c) ABàC, CàAD
d) AàBCD

(xlviii) Cardinality is termed as_____ in the relational model.

a) A number of tuples
b) A number of attributes
c) A number of tables
d) all of these

(xlix) There are_____kind of data models in DBMS.

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

(l) A traditional data administrator performs _____

a) Tune database performance
b) Establish backup and recovery procedures
c) Resolve data ownership issues
d) Protect the security of the database

(li) _____ is part of an administrative policy to secure a database.

a) Authentication policies
b) Limiting particular areas within a building to only authorized people
c) Ensure appropriate responses rates are in external maintenance agreements
d) All of these

(lii) Backward recovery is _____.

a) Where the before-images are applied to the database

b) Where the after-images are applied to the database

c) Where the after-images and before-images are applied to the database

d) Switching to an existing copy of the database

(liii) In a relation between the entities the type and condition of the relation should be specified. That is called as_____attribute

a) Descriptive

b) Derived

c) Recursive

d) Relative

(liv) A single valued attribute is

a) Register_number

b) Address

c) SUBJECT_TAKEN

d) Reference

(lv) Not applicable condition can be represented in relation entry as_____.

a) NOT

b) NA

c) NULL

d) None of these

(lvi) The attribute AGE is _____, which calculated from DATE_OF_BIRTH.

a) Single valued

b) Multi valued

c) Composite

d) Derived

(lvii) A _____ schema represents name of the relation with its attributes.

a) relation schema

b) logical schema

c) Physical schema

d) None of these

(lviii) The set of _____of a relation at a particular instance of time is called as relation instance.

a) Tuples

b) Attributes

c) row d) none of these

(lix) The number of tuples in a relation is known as _____.

a) Cardinality b) Degree

c) Both Cardinality & Degree d) None of these

(lx) Any set of attributes that allows us to identify unique rows (tuples) in a given relation are called_____.

a) super keys b) primary key

c) foreign key d) None of these

(lxi) Tuple Relational Calculus is/are _____ query language

a) non-procedural b) procedural

c) both non-procedural & procedural d) none of these

(lxii) _____ is the syntax for views where v is view name?

a) Create view v as “query name”; b) Create “query expression” as view

c) Create view v as “query expression”; d) Create view “query expression”;

(lxiii) _____constraint helps to validate the values of a column to meet a particular condition.

a) CHECK b) DEFAULT

c) Both CHECK & DEFAULT d) None of these

(lxiv) _____ is used to remove all records from a table, including all spaces allocated for the records are removed

a) TRUNCATE b) DROP

c) DELETE d) None of these

(lxv) A_____is a query that retrieves rows from more than one table or view.

a) Start
b) End
c) Join
d) All of these

(lxvi) _____are the join types in join condition.

a) Cross join
b) Natural join
c) Join with USING clause
d) All of these

(lxvii) The file organization which allows us to read records that would satisfy the join condition by using one block read is_____.

a) Heap file organization
b) Sequential file organization
c) Clustering file organization
d) Hash file organization

(lxviii) The highest level in the hierarchy of data organization is called_____.

a) Data bank
b) Data base
c) Data file
d) Data record

(lxix) _____ are the type of Primary indexes, secondary indexes and cluster indexes.

a) ordered indexes
b) un ordered indexes
c) linear indexes
d) none

(lxx) _____is an example of non dense index.

a) ternary index
b) secondary index
c) primary index
d) clustered index