BRAINWARE UNIVERSITY

Term End Examination 2020 - 21

Programme – Bachelor of Science (Honours) in Computer Science

Course Name – Database Management System

Course Code - BCSC301

Semester / Year - Semester III

Time allotted : 75 Minutes Full Marks : 60

[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 60=60

1. *(Answer any Sixty)*

(i) A relational database consists of a collection of

a) Tables b) Fields

c) Records d) Keys

(ii) A _____ in a table represents all the attributes with or without a value.

a) Column b) Key

c) Row d) Entry

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

a) Record b) Column

c) Tuple d) Key

(iv) A collection of related data.

a) Information b) Valuable information

c) Database d) Metadata

(v) DBMS manages the interaction between _____ and database.

a) Users b) Clients

c) End Users d) Stakeholders

(vi) DBMS is a collection of _____ which enable users to create and maintain a database.

a) program
b) translator
c) language activity
d) key

(vii) What is the full form of DBA?

a) Database Access
b) Database Administrator
c) Database Authority
d) None of the these

(viii) Which term is used to refer a row in a table?

a) attribute
b) tuple
c) field
d) instance

(ix) Which database level is closest to the users?

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

(x) Which of the following is not a Schema?

a) Database Schema
b) Physical Schema
c) Critical Schema
d) Logical Schema

(xi) Which of the following is a Data Model?

a) a. Entity-Relationship model
b) Relational data model
c) Object-Based data model
d) All of these

(xii) The restrictions placed on the data.

a) Relation
b) Attribute
c) Parameter
d) Constraint

(xiii) A characteristic of an entity.

a) Relation
b) Attribute

c) Parameter d) Constraint

(xiv) In an ER model, which one is used to store its data?

a) entity b) attribute

c) relationship d) notation

(xv) Attributes correspond to

a) Rows of a table b) Columns of a table

c) Degree of a table d) None of these

(xvi) A set of tuples at any given instant of time is called

a) Table b) Row

c) View d) None of these

(xvii) In an E-R diagram attributes are represented by

a) rectangle b) square

c) ellipse d) triangle

(xviii) In the relational modes, cardinality is termed as:

a) Number of tuples b) Number of attributes

c) Number of tables. d) Number of constraints

(xix) Cartesian product in relational algebra is

a) Unary operator. b) Binary operator.

c) Ternary operator d) not defined

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

a) Groups b) Table

c) Attributes d) Switchboards

(xxi) An ER model was introduced by

a) E.F.Codd
b) P.P.Chen
c) Constantine
d) None of these

(xxii) The full form of ER Diagram is

a) Entity -Relationship Diagram
b) Entity Relation Diagram
c) Entity Rotation Diagram
d) None of these

(xxiii) Which of the following cannot be used to modify the data in a database

a) update
b) insert
c) delete
d) drop

(xxiv) A logical description of some portion of database that is required by a user to perform task is called as

a) System View
b) User View
c) Logical View
d) Data View

(xxv) In an ER model, ……. is described in the database by storing its data.

a) Entity
b) Attribute
c) Relationship
d) Notation

(xxvi) _____ command is used for modifying an existing table.

a) CREATE
b) ALTER
c) DROP
d) None of these

(xxvii) DDL stands for _____

a) Data Definition Language
b) Data Define Language
c) Data Dictionary Language.
d) None

(xxviii) Grant and revoke are ……. statements.

a) DDL
b) TCL

c) DCL
d) DML

(xxix) Select operator (?) works row wise where as project operator(?) works

a) Row wise only
b) Column wise only
c) Row wise only and Column wise only
d) None of these

(xxx) When we want to display records within attributes from many relations then we use

a) SELECT operation
b) PROJECT operation
c) JOIN operation
d) None of these

(xxxi) How many tables can be joined to create a view

a) 1
b) 2
c) Depends on DBMS
d) None of these

(xxxii) The language used in application programs to request data from the DBMS is referred

a) DML
b) DDL
c) VDL
d) SDL

(xxxiii) The _____ aggregation operation adds up all the values of the attribute

a) add
b) avg
c) max
d) sum

(xxxiv) What is a subquery?

a) A subquery is a select-from-where expression that is nested within another query
b) A subquery is any query that is nested within another query
c) A subquery is a relation that is externally specified which can be used to handle data in queries
d) a. A subquery is a condition that excludes all the invalid tuples from the database

(xxxv) select distinct dept_name from institute; Explanation of this query is

a) It gives all the tuples having a distinct dept_name

b) It gives the dept_name attribute values of all tuples without repetition

c) It gives all the dept_name attribute of all the tuples

d) It gives all the tuples having a null value under the dept_name attribute

(xxxvi) Which of the following information does an SQL DDL not specify?

a) The schema for each relation

b) The integrity constraints

c) The operations on the tuples

d) The security and authorization information for each relation

(xxxvii) What is the syntax to load data into the database? (Consider D as the database and a, b, c as data)

a) enter into D (a, b, c);

b) insert into D values (a, b, c);

c) insert into D (a, b, c);

d) insert (a, b, c) values into D;

(xxxviii) Which of the following syntax of the basic query is correct?

a) select to

b) select <attribute> from <elation></elation></attribute>

c) select on

d) select of

(xxxix) A table joined with itself is called

a) Join

b) Self Join

c) Outer Join

d) Equi Join

(xl) To delete a particular column in a relation the command used is

a) UPDATE

b) DROP

c) ALTER

d) DELETE

(xli) The _____ operator is used to compare a value to a list of literals values that have been specified.

a) BETWEEN
b) ANY
c) IN
d) ALL

(xlii) The database schema is written in

a) HLL
b) DML
c) DDL
d) DCL

(xliii) Key to represent relationship between tables is called

a) primary key
b) secondary key
c) foreign key
d) none of these

(xliv) A primary key cannot be _____

a) void
b) null
c) Void and null
d) None

(xlv) A foreign key refers to another ____

a) Table
b) Row
c) Table and Row
d) None

(xlvi) The candidate keys which are not selected as primary key is called

a) Super Keys
b) Candidate Keys
c) Alternate Keys
d) None of these

(xlvii) A key that has no meaning to the business or organization is

a) Candidate Key
b) Alternate Key
c) Artificial Key
d) None of these

(xlviii) The column in the child table that references a primary key of the parent table is called

a) Candidate Key
b) Foreign Key
c) Composite key
d) None of these

(xlix) A rule that states that in a base relation the value of attribute of a primary key cannot be null is called as

a) Entity Integrity Rule
b) Referential Integrity Rule
c) Security Integrity Rule
d) None of these

(l) A NULL means

a) Unknown
b) Known
c) Known partially
d) None of these

(li) An instance of relational schema R (A, B, C) has distinct values of A including NULL values. Which one of the following is true?

a) A is a candidate key
b) A is not a candidate key
c) A is a primary Key
d) A is a candidate key and A is a primary key

(lii) Choose the correct statement regarding superkeys

a) A superkey is an attribute or a group of multiple attributes that can uniquely identify a tuple
b) A superkey is a tuple or a set of multiple tuples that can uniquely identify an attribute
c) Every superkey is a candidate key
d) A superkey is an attribute or a set of attributes that distinguish the relation from other relations

(liii) The files used for speedy disk search by providing the specialized structures of data are classified as

a) indexes
b) glossaries
c) content specification
d) listing documents

(liv) The “all-or-none” property is commonly referred to as _____

a) Isolation
b) Durability
c) Atomicity
d) None of the mentioned

(lv) Execution of translation in isolation preserves the _____ of a database

a) Atomicity
b) Consistency
c) Durability
d) All of the mentioned

(lvi) A transaction that has not been completed successfully is called as _____

a) Compensating transaction
b) Aborted transaction
c) Active transaction
d) Partially committed transaction

(lvii) The protocol that indicates when a transaction may lock and unlock each of the data items is called as _____

a) Locking protocol
b) Unlocking protocol
c) Granting protocol
d) Conflict protocol

(lviii) If a transaction Ti may never make progress, then the transaction is said to be _____

a) Deadlocked
b) Starved
c) Committed
d) Rolled back

(lix) The two phase locking protocol consists which of the following phases?

a) Growing phase
b) Shrinking phase
c) Both Growing phase and Shrinking Phase
d) None of the mentioned

(lx) In the _____ scheme, a transaction that wants to update the database first creates a complete copy of the database.

a) Shadow copy
b) Shadow Paging
c) Update log records
d) All of the mentioned