## <u>Isteer Test Paper - 2</u>

1. DBMS is a collection of that enables user to create
and maintain a database.
A) Keys
B) Translators
C) Program
D) Language Activity
2. In a relational schema, each tuple is divided into fields called
A) Relations
B) Domains
C) Queries
D) All of the above
<ul> <li>3. In an ER model,</li></ul>
<ul><li>4. DFD stands for</li><li>A) Data Flow Document</li><li>B) Data File Diagram</li><li>C) Data Flow Diagram</li><li>D) Non of the above</li></ul>

<ul><li>5. A top-to-bottom relationship among the items in a database is established by a</li><li>A) Hierarchical schema</li><li>B) Network schema</li><li>C) Relational Schema</li><li>D) All of the above</li></ul>
<ul> <li>6 table store information about database or about the system.</li> <li>A) SQL</li> <li>B) Nested</li> <li>C) System</li> <li>D) None of these</li> </ul>
<ul><li>7defines the structure of a relation which consists of a fixed set of attribute-domain pairs.</li><li>A) Instance</li><li>B) Schema</li><li>C) Program</li><li>D) Super Key</li></ul>
<ul><li>8</li></ul>

9. A logical schema A) is the entire database B) is a standard way of organizing information into accessible parts. C) Describes how data is actually stored on disk. D) All of the above 10. ..... is a full form of SQL. A) Standard query language B) Sequential query language C) Structured query language D) Server side query language 11) A relational database developer refers to a record as A. a criteria B. a relation C. a tuple D. an attribute 12) ..... keyword is used to find the number of values in a column. A. TOTAL **B. COUNT** 

C. ADD

D. SUM

- 13) An advantage of the database management approach isA. data is dependent on programsB. data redundancy increasesC. data is integrated and can be accessed by multiple programsD. none of the above
- 14) The collection of information stored in a database at a particular moment is called as ......
- A. schema
- B. instance of the database
- C. data domain
- D. independence
- 15) Data independence means
- A. data is defined separately and not included in programs.
- B. programs are not dependent on the physical attributes of data
- C. programs are not dependent on the logical attributes of data
- D. both B and C
- 16) A ..... is used to define overall design of the database
- A. schema
- B. application program
- C. data definition language
- D. code
- 17) Key to represent relationship between tables is called
- A. primary key
- B. secondary key
- C. foreign key

D. none of the above
<ul><li>18) Grant and revoke are statements.</li><li>A. DDL</li><li>B. TCL</li><li>C. DCL</li><li>D. DML</li></ul>
<ul><li>19) DBMS helps achieve</li><li>A. Data independence</li><li>B. Centralized control of data</li><li>C. Neither A nor B</li><li>D. Both A and B</li></ul>
<ul><li>20) command can be used to modify a column in a table</li><li>A. alter</li><li>B. update</li><li>C. set</li><li>D. create</li></ul>
21)DCL stands for A) Data Control Language B) Data Console Language C) Data Console Level D) Data Control Level

C. DCL
D. DML
23) DBMS helps achieve
A. Data independence
B. Centralized control of data
C. Neither A nor B
D. Both A and B
24) Key to represent relationship between tables is called
A. primary key
B. secondary key
C. foreign key
D. none of the above
25) An advantage of the database management approach is
A. data is dependent on programs
B. data redundancy increases
C. data is integrated and can be accessed by multiple programs
D. none of the above

**Isteer E-R Modeling Questions** 

Suppose you are given the following requirements for a simple

database for the National Hockey League (NHL):

22) Grant and revoke are ...... statements.

A. DDL

B. TCL

Question 1:

- the NHL has many teams,
- each team has a name, a city, a coach, a captain, and a set of players,
- each player belongs to only one team,
- each player has a name, a position (such as left wing or goalie), a skill level, and a set of injury records,
- a team captain is also a player,
- a game is played between two teams (referred to as host\_team and guest\_team) and has a date (such as May 11th, 1999) and a score (such as 4 to 2). Construct a clean and concise ER diagram for the NHL database.

## Question 2:

A university registrars office maintains data about the following entities:

- 1. courses, including number, title, credits, syllabus, and prerequisites;
- 2. course offerings, including course number, year, semester, section number,

instructor(s), timings, and classroom;

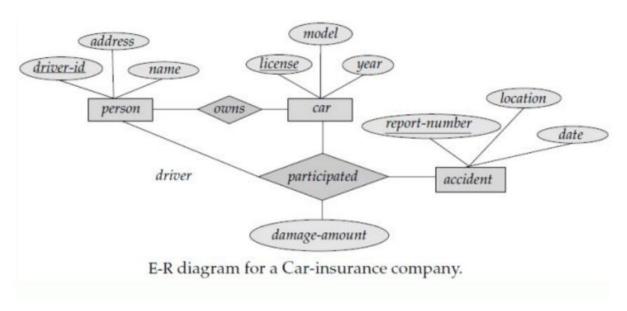
- 3. students, including student-id, name, and program;
- 4. instructors, including identification number, name, department, and title.

Further, the enrollment of students in courses and grades warded to students in each course they are enrolled for must be appropriately modeled. Construct an E-R diagram for the registrars

ofce. Document all assumptions that you make about the mapping constraints.

## Question 3:

(a) Construct an E-R diagram for a car-insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents.



(b) Construct appropriate tables for the above ER Diagram?