Seat No:_____   Enrollment No:_____

PARUL UNIVERSITY
FACULTY OF MANAGEMENT
MBA, Summer 2017 - 18 Examination

Semester: 4   Date: 23/05/2018
Subject Code: 06205252   Time: 10:30 am to 01:00 pm
Subject Name: Data Base Management   Total Marks: 60

Instructions
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.

A).Multiple choice type questions/Fill in the blanks.   (Each of 1 mark)   **(05)**

   1.   Insert into instructor values (10211, 'Smith', 'Biology', 66000);

      a) Query   c) DML
      b) Relational   d) DDL

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

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

   3 For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute

      a) Domain   c) Relation
      b) Set   d) Schema

   4 Select _____ dept_name
      Here which of the following displays the unique values of the column?

      a) All   c) From
      b) Distinct   d) Name

   5 Foreign key is the one in which the _____ of one relation is referenced in another relation.

      a) Foreign key   c) Primary key
      b) References   d) Check constraint

B).Define the following. (Each of 1 mark)   **(05)**
   1.   Database management System
   2.   Alternate Key
   3.   NULL Value
   4.   E-R diagram
   5.   Entity integrity constraint

C).Direct questions. (Each of 1 mark)   **(05)**
   1.   State the components of database system environment
   2.   State any four responsibilities of DBA
   3.   Explain Data and Metadata with example.
   4.   Explain INSERT command with syntax and example
   5.   State and explain database utilities

Q.2 Answer the following questions.

  A).   Explain the two-tier and three-tier architecture of DBMS with relevant diagram   **(07)**

  B).   Define degree of relationships. Explain Unary, Binary and Ternary relationships in detail   **(08)**

Q.3 Answer the following questions.
  A).   What are the Difference Between File System and DBMS? Explain the Benefits of DBMS.   **(07)**

Write the SQL Queries for the given schema
   Student(Name, Studentnumber, Class, Major)
   Course(CourseName, CourseNumber, Credit Hours, Department)
   Section(Sectionidentifier, coursenumber, Semester, Year, Instructor)
   Grade_report(studentNumber, SectionIdentifier, Grade)
   Prerequisite(Coursenumber, Prerequisite Number)

B).   **(08)**

1. Change the class of student 'Uday' to 2
2. Delete the record for the student whose name is 'GEETA' and whose student number is 17
3. Retrieve the names of all senior students majoring in 'CS'
4. For each section taught by Prof. Jain., retrieve the course number, semester, year

Q.4 Attempt any two questions. **(Each of 7.5 mark)**   **(15)**

1. For each of the following pairs of related entities, indicate whether there is one-to-many or a many-to-many relationship. Draw ER diagram for each of the relations:
   a. STUDENT and COURSE (students register for courses)
   b. COURSE and SECTION (COURSES HAVE SECTION)
   c. SECTION and ROOM (sections are scheduled in rooms)
   d. INSTRUCTOR and COURSE

2. Define join. Explain in brief the various types of joins

3. Define attribute. Explain all the categories of attribute with relevant example.

4. Distinguish between primary key and Foreign key. Explain in detail Integrity constraints with relevant example