

**Goa Vidyaprasarak Mandal's**  
**GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE AND**  
**ECONOMICS, PONDA - GOA**  
**B.C.A. (SEMESTER- III) EXAMINATION, OCTOBER 2019**  
**DATABASE MANAGEMENT SYSTEM**

**Duration: 2hrs**

**Marks: 50**

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Instructions: a) All the questions are compulsory.  
b) Draw diagram with pencil wherever necessary.

Q1.A) Select the correct option and rewrite the statement. (5\*1=5)

- 1) In the \_\_\_\_\_ normal form, a composite attribute is converted to individual attributes  
a) First b) Second c) Third d) Fourth
- 2) Relational Algebra is a \_\_\_\_\_ query language that takes two relations as input and produces another relation as an output of the query.  
a) Relational b) Structural c) Procedural d) Fundamental
- 3) 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
- 4) 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
- 5) Which one of the following provides the ability to query information from the database and to insert tuples into, delete tuples from and modify tuples in the database?  
a) DML (Data Manipulation Language) c) Query  
b) DDL (Data Definition Language) d) Relational Schema

Q1.B) Answer the following.

- 1) Define Dbms? (5\*1=5)
- 2) List the user of dbms?
- 3) Define Domain ?
- 4) Define Normalization?
- 5) List the different Keys available in dbms?

Q2. Answer the Following. (10)

- A) What are advantages of DBMS over traditional file based systems? (2)
- B) Difference between OLAP and OLTP. (3)
- C) Explain with proper example 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Normal form. (5)

Q3 Answer the following. (10)

- A) What are the differences between DDL, DML and DCL in SQL? (2)
- B) Explain the concept of ACID properties in DBMS? (3)
- C) Explain with proper application Concept of Data Mining? (5)

Q4. Answer the Following. (10)

- A) What is the difference between having and where clause? (2)
- B) What are the different levels of abstraction in the DBMS? (3)
- C) Explain with Proper application concept of Data warehouse ? (5)

Q5. Answer the Following. (10)

- A) What is Data Model ? (2)
- B) Explain Data mart. (3)
- C) Explain Distributed Database with proper Example? (5)

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