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Term End Examination – June, 2017
Diploma in Computer Application
DCA-05: DATABASE SYSTEM (2016 Syllabus)

Time - 3 Hours

Full Mark - 100

*Answer any **four** questions from Group - 'A', any **two** questions from
Group - 'B' and any **three** questions from Group - 'C'*

Group 'A'

Marks: $5 \times 4 = 20$

*(Answer any **four** questions each within 100 words)*

Q. No. 1

- a) List any four disadvantages of file oriented systems.
- b) Write the characteristics of a database System.
- c) What are multi-valued and derived attributes? Give examples.
- d) Explain the use of Grant and Revoke Commands in SQL.
- e) Define a Strong entity and a Weak entity. Give examples.
- f) Define the terms Tuple and attribute of a relation. Give example.
- g) Define and give examples of an entity and an entity set.

Group 'B'

Marks: $10 \times 2 = 20$

*(Answer any **two** questions each within 250 words)*

Q. No. 2

- a) What are different types of database users?
- b) Write a short notes on Data Definition Language (DDL)
- c) Differentiate between Physical and Logical Data Independence.
- d) What is SQL? What is its use in databases?
- e) Write the properties of a Relation or Table in a relational database.

Group 'C'

Mark: $20 \times 3 = 60$

*(Answer any **three** questions each within 500 words)*

Q.No.3. What is a database? Describe the advantages and disadvantages of using of database systems?

4. Discuss the roles and responsibilities of a Database Administrator (DBA).
5. What is a data model? Explain the properties of relational data model.
6. Explain the basic operations of relational algebra with an example.
7. What is a Key? What are different types of Keys in relational databases?
8. Explain 3NF and BCNF with example. What is the difference between 3NF and BCNF?