

**0704**  
**POST GRADUATE DIPLOMA IN COMPUTER APPLICATION**  
**EXAMINATION, 2019**  
**DATABASE MANAGEMENT SYSTEM**

**Paper – IV**

Time: Three Hours

Maximum Marks: 75

**PART – A (खण्ड – अ)**

[Marks: 20]

*Answer all questions (50 words each).*

*All questions carry equal marks.*

सभी प्रश्न अनिवार्य हैं। प्रत्येक प्रश्न का उत्तर 50 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

**PART – B (खण्ड – ब)**

[Marks: 35]

*Answer all five questions (250 words each).*

*All questions carry equal marks.*

सभी पाँच प्रश्न कीजिए।

प्रत्येक प्रश्न का उत्तर 250 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

**PART – C (खण्ड – स)**

[Marks: 20]

*Answer any two questions (300 words each).*

*All questions carry equal marks.*

कोई दो प्रश्न कीजिए। प्रत्येक प्रश्न का उत्तर 300 शब्दों से अधिक न हो।

सभी प्रश्नों के अंक समान हैं।

## **PART – A**

- Q.1 (i) Write the components of a Database. [2]  
(ii) What are the different types of Relationship? [2]  
(iii) What do you mean by derived attribute? [2]  
(iv) List out the characteristics of a typical Relational DBMS. [2]  
(v) Define foreign key. [2]  
(vi) What do you mean by Functional Dependencies? [2]  
(vii) List out different types of SQL commands. [2]  
(viii) Write the differences between index and sort. [2]  
(ix) What is database privilege? [2]  
(x) Which are the password – related threats in database? [2]

## **PART – B**

- Q.2 Discuss the characteristics of data in a database. [7]  
Q.3 Explain the symbols used to draw E-R diagram. [7]  
Q.4 Explain second normal form with example. [7]  
Q.5 Discuss the basic data types in SQL. [7]  
Q.6 Who are the main users of database? Write the responsibilities of DBA. [7]

## **PART – C**

- Q.7 (a) Discuss the advantages of DBMS. [5]  
(b) Explain logical and physical model. [5]  
Q.8 (a) Discuss attribute inheritance with example. [5]  
(b) Describe the concept of super class and subclass types taking suitable example. [5]  
Q.9 (a) Define Boyce - Codd normal form. How does it differ from 3NF? Why is it considered a stronger form of 3NF? [5]  
(b) What is a relation algebraic expression? Explain relational algebraic operations. [5]  
Q.10 (a) Discuss the recovery facilities provided by DBMS. [5]  
(b) Write a note on View in SQL. [5]  
Q.11 (a) Discuss types of Integrity Constraints. [5]  
(b) Write a note on authorization of users to database. [5]