

S.No. 5210

16 SCCCA 4/16 SCCIT 9

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, APRIL 2022.

**Part III — Computer Applications/Information
Technology – Major**

DATABASE SYSTEMS

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Bring out the disadvantages of file processing system.
2. Give the levels of data abstraction.
3. List out Additional relational algebra operations.
4. Define Null values.
5. What is Query?
6. What is DDL?
7. Distinguish between *stored attributes* and *derived attributes*.

8. Define Entity set.
9. What is BCNF?
10. List out the desirable properties of decomposition.

PART B — ($5 \times 5 = 25$)

Answer ALL questions.

11. (a) Who is DBA? Summarize the responsibilities of DBA.

Or

- (b) Narrate the applications of DBMS.

12. (a) Give a note on Null values with examples.

Or

- (b) Explain Extended Relational Algebra operations.

13. (a) Explicate the basic structure of SQL queries.

Or

- (b) Give a short note on Authorisation.

14. (a) Explain QBE with example.

Or

- (b) Illuminate Tuple relational calculus.

15. (a) Bring out the Importance of Normalization.

Or

- (b) Give a note on Database design processes.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Elucidate the advantages of DBMS in detail.
17. Explicate Relational algebra operations with example.
18. Explain SQL data types with example.
19. Illuminate entity-relationship model in detail.
20. Explicate 1NF, 2NF with suitable example.