

NOVEMBER/DECEMBER 2019

**BSC41 — DATABASE MANAGEMENT  
SYSTEMS**

Time : Three hours

Maximum : 75 marks



**SECTION A — (10 × 2 = 20 marks)**

Answer ALL the questions.

What is meant by data?

2. Define entity.
3. What is Equi-Join?
4. Mention any two SET operators in relational algebra.
5. What is the purpose of normalization?
6. Define BCNF.
7. What is SQL?
8. Mention the relational operators used in SQL.
9. Define PL/SQL.
10. List the attributes used in Explicit cursor.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Describe in detail the purpose of DBMS.  
Or  
(b) What is the use of keys in database? Explain any three keys.
12. (a) What is the purpose of division operator? Explain.  
Or  
(b) Write notes on tuple oriented relational calculus.
13. (a) Write a short note on Second Normal form.  
Or  
(b) Explain Functional Dependency with example.
14. (a) Explain select SQL operations with example.  
Or  
(b) Describe Group By clause with example.
15. (a) Differentiate Function and Procedure in PL/SQL.  
Or  
(b) Explain looping statement in PL/SQL with example.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. What is an E-R diagram? Explain it with an example.
17. Explain with examples the SELECT, PROJECT, RENAME and JOIN operations in relational algebra.
18. Discuss in detail about the Third Normal form with an example.
19. Explain the role of constraints in Table definition with example.
20. Write short notes about cursor with example.

