

(i) Printed Pages : 2

Roll No. ....

(ii) Questions : 9

Sub. Code : 

0	9	4	1
---	---	---	---

Exam. Code : 

0	0	3	0
---	---	---	---

**Bachelor of Computer Applications 4<sup>th</sup> Semester  
(2042)**

**DATABASE MANAGEMENT SYSTEM**

**Paper : BCA-16-405**

**Time Allowed : Three Hours]**

**[Maximum Marks : 65**

**Note :—** Attempt **one** question each from Sections A, B, C and D.  
Each question is of 13 marks. Section E is compulsory.

**SECTION—A**

1. Explain three level architecture of Data base management system. 13
2. (a) Explain the concept of database instance and schema with the help of example. 5  
(b) Differentiate between File system and DBMS. 8

**SECTION—B**

3. Explain network and hierarchical models. 13
4. (a) Explain Codd's rules for an RDBMS. 8  
(b) Explain selection and projection operations used in relational algebra. 5



### SECTION—C

5. (a) Explain GRANT and REVOKE in SQL with examples. 5  
(b) Explain difference between DELETE, DROP and TRUNCATE commands with example. 8
6. (a) Explain any three date functions. 6  
(b) What are views ? Why are they significant in DBMS ? 7

### SECTION—D

7. (a) Explain block structure of PL/SQL. 7  
(b) How exceptions are handled in PL/SQL ? 6
8. What is a database trigger ? What are its various types ? What functions are performed by triggers ? Explain with suitable PL/SQL code. 2+5+3+3

### SECTION—E

9. Write a note on :
- (a) Foreign Key 2  
(b) ROLL BACK Statement 2  
(c) Cursor 3  
(d) PL/SQL Data Types 3  
(e) Working of GROUP BY clause 3