

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MCA DEGREE EXAMINATION MAY 2018  
(Second Semester)

Branch - COMPUTER APPLICATIONS

DATABASE MANAGEMENT SYSTEM

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks ( 5 x 6 = 30)

- 1 a Describe Database System Architecture.  
OR  
b Explain the Role of DBA.
- 2 a Write notes on SQL set operations.  
OR  
b Explain PL / SQL block structure.
- 3 a Discuss the fundamental operations of Relational Algebra.  
OR  
b Elaborate on Functional Dependencies.
- 4 a Explain commit and rollback operations.  
OR  
b Write notes on concurrency control.
- 5 a List out properties of Indexes.  
OR  
b Explain static hashing in detail.

SECTION -B (45 Marks!)

Answer any THREE questions

ALL questions carry EQUAL Marks (3 x 15 = 45)

- 6 Briefly explain entity relational model with examples.
- 7 Discuss nested queries and join queries.
- 8 Explain THIRD NORMAL FORM and BCNF.
- 9 Describe two phase locking in detail.
- 10 Briefly explain B+ trees and their operations.

Z-Z-Z

END