

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code : 51345**

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Fourth Semester

Computer Science and Engineering

CS 2255/CS 46/CS 1254/080250009/10144 CS 406 — DATABASE MANAGEMENT SYSTEMS

(Common to Information Technology)

(Regulation 2008/2010)

(Common to PTCS 2255 – Database Management Systems for B.E. (Part-Time)  
Third Semester – Computer Science and Engineering, Regulation 2009)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the three levels of data abstraction?
2. What is an entity?
3. Define a super key.
4. What is a trigger?
5. Define Normalization.
6. What are functional dependencies?
7. Define deadlock.
8. What is meant by serializability?
9. Describe Tuning.
10. What are ordered indices?

PART B — (5 × 16 = 80 marks)

11. (a) (i) What are the functions of database administrator? (6)  
(ii) Explain the architecture of a database system. (10)

Or

- (b) (i) Write a note on database languages. (8)  
(ii) Draw an E-R diagram corresponding to customers and loans. (8)

12. (a) Explain the various operations in relational algebra with examples. (16)

Or

- (b) Write a note on :  
(i) Embedded SQL (8)  
(ii) Distributed databases. (8)

13. (a) Explain Boyce Codd Normal form and Fourth Normal forms with suitable example. (16)

Or

- (b) Explain first, second and third normal forms with suitable example. (16)

14. (a) (i) Write a note on SQL facilities. (8)  
(ii) With a neat Sketch explain the states of a transaction. (8)

Or

- (b) (i) Explain the ACID Properties of a transaction. (8)  
(ii) Describe two phase locking protocol with examples. (8)

15. (a) (i) Explain magnetic disk and tertiary storage. (8)  
(ii) Write a note on Hashing. (8)

Or

- (b) Explain the steps involved in query processing. Give examples. (16)