

Seat No.	
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T.E. (CSE) (Semester-VI) (Revised)
Examination, May - 2018
DATABASE ENGINEERING
Sub. Code : 66860

Day and Date : Tuesday, 08 - 05 - 2018

Total Marks : 50

Time : 2.30 p.m. to 4.30 p.m.

- Instructions :**
- 1) Attempt any one questions from Q. 1 and Q. 2.
 - 2) Q. 3 and Q. 6 are compulsory.
 - 3) Attempt one question from Q. 4 and Q. 5.

Q1) a) Explain the traditional file based approach and its limitations. [6]

b) Explain the concept of database schema with an example. [6]

Q2) a) Explain the concept of normalization. Explain the Boyce code normal form. Is it stronger from then 3NF. Justify your answer. [6]

b) Explain with proper syntax and examples the DDL statement in SQL. [6]

Q3) a) What is an ER diagram? Draw an ER diagram for an University database. Explain each step in detail. [7]

b) What are functional dependencies? Explain the rules of it. [6]

Q4) a) What is an index in a database system? Explain dense index with appropriate figure. [6]

b) Explain the fixed length records file organisation and briefly explain the two problems with this approach. [6]

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Q5) a) State the various ways of organising records in a file. Explain the sequential file organisation with necessary figure. [6]

b) What is a transaction? Explain various properties of transaction. [6]

Q6) a) What is lock granularity? Explain the table level and page level locking. [7]

b) Explain the redo phase recovery actions when the database system is restarted after a crash. [6]

