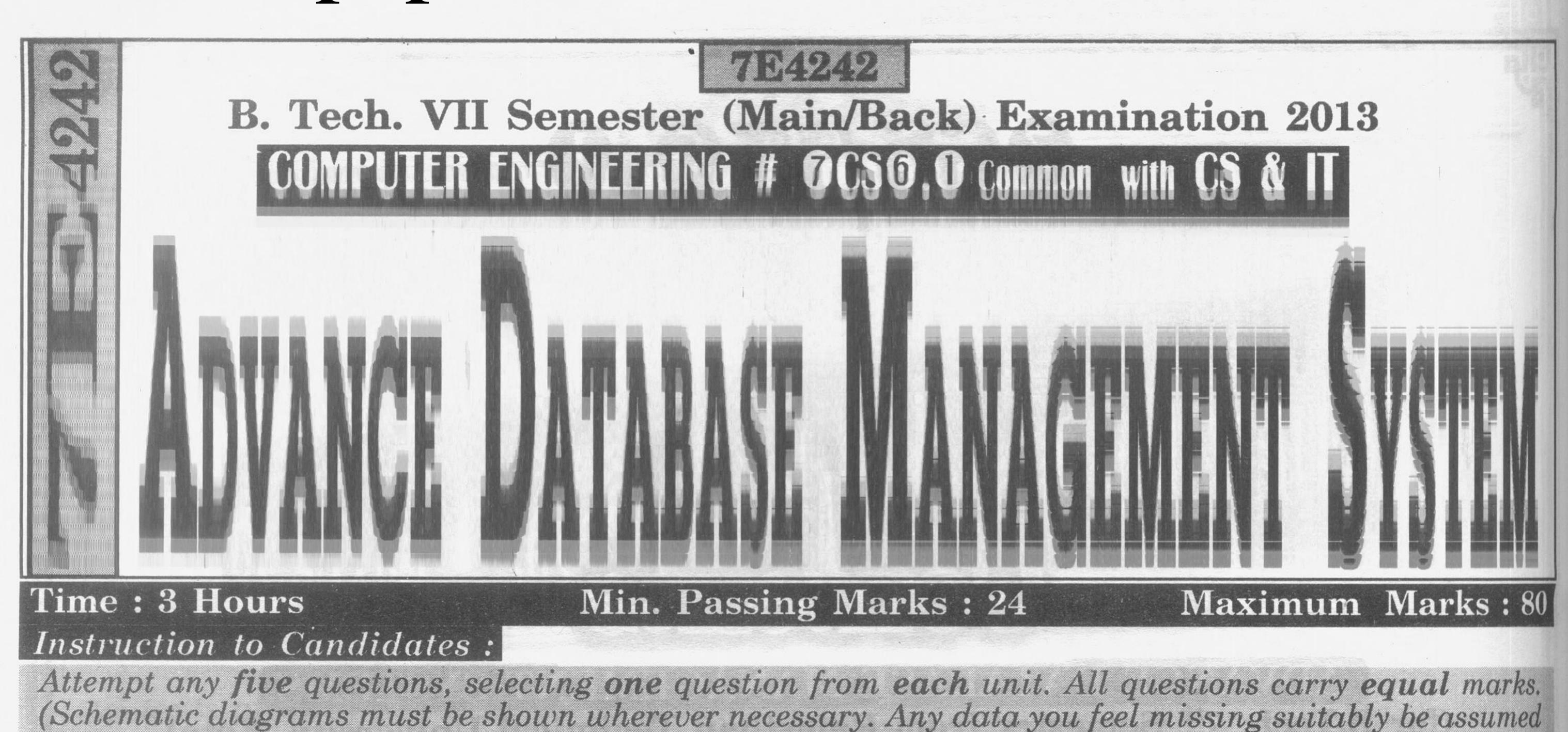
# www.rtupaper.com



(Unit-'I')

1. (a) What are the goal of Query Optimization. Explain pushing section in alternative plan?

[8]

(b) Explain the term system catalog? Also explain how catalog are stored? [8]

#### OR

- 1. (a) Describe Enumeration of alternative plan in brief? [8]
  - (b) Write short note on:
    - (i) Decomposition of query into blocks
    - (ii) Estimation cost of a plan.  $[4 \times 2 = 8]$

# (Unit-'II')

- 2. (a) Explain ORDBMS and OODBMS in brief? [8]
  - (b) What are different structured data types available in object database system? [8]

## OR

- 2. (a) What is the object database system? How object database system support for complex object and types of object? [8]
  - (b) Compare ORDBMS and OODBMS with various database system? [8]

## (Unit-'III')

- 3. (a) What is concurrency control? What are the recovery techniques to overcome from concurrency?

  [8]
  - (b) Explain parallelizing individual operation. [8]

#### OR

- 3. (a) What is distributed DBMS? Explain its architecture. [8]
  - (b) Write short note on:
    - (i) Data replication and allocation.
    - (ii) Distributed query processing. [4×2

# (Unit-'IV')

- 4. (a) What is the database security? Explain Secrecy, integrity and availability within database security?
  - (b) Explain Access control in briefly?

#### OR

- 4. (a) Explain the additional Issues related to security?
  - (b) Write a short note on:
    - (i) Authorization
    - (ii) DOD Security level.

### (Unit-V)

 $[4 \times 2 = 8]$ 

- 5. (a) Describe POSTGRES user interface? Explain its architecture? [8]
  - (b) Explain storage and indexing in brief? [8

#### OR

- 5. (a) Explain in brief Query processing, Optimization and system architecture? [8]
  - (b) What is XML? What is the background of XML with SGML & HTML? [8]