**M.G.M.’s College of Engineering, Nanded.**

**Computer Science and Engineering Department.**

**Subject: ADBMS Assignment No.: 1 Class: TE CSE (I & II)**

1. Explain ACID properties.
2. Draw and explain transaction states.
3. Consider the following two transactions with data items A & B and the initial values are Rs. 2000 and Rs.1000 respectively

T1: T1:

Read(A); Read(A);

A:=A-50; temp:=A\*0.2;

Write (A); A:=A-temp;

Read(B); write(A);

B:=B+50; read(B);

Write(B); B:=B+temp;

Write(B);

Execute the above transactions in serial schedule T1 then T2 and execute the above transactions in concurrent manner to maintain the consistency.

1. What is concurrent and serial execution?
2. Explain conflict serializability.
3. What is serializability? Explain view serializability.
4. What is recoverability? Explain recoverable schedule.
5. What is 2PL? Explain 2PL protocol in brief.
6. Write a note on What is timestamp? Explain timestamp based protocol.
7. Explain the multiple granulity.
8. Explain validation-based protocol in detail.
9. What is deadlock? Explain deadlock prevention.
10. Explain deadlock detection and deadlock recovery.
11. Explain the insert and delete operations.
12. Explain weak levels of consistency.
13. Write a short note on:

* Concept of implementation of atomocity & durability.
* Starvation.
* Graph based protocol

**Subject incharge**

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TE CSE-II TE CSE-I