K.D.K. College of Engineering, Nagpur
Department of Information Technology
Assignment No. 3 based on Unit-V (CO603.5) (Submit upto 25-03-19)
VI SEM B.E. (IT) (CBS)
Database Management System (BEIT603T)   Date: 19-01-2019

CO603.5 Understand concepts of transaction management , concurrency control and recovery techniques.
 (BTL indicates Blooms Taxonomy level 1 Remember, 2 Understand, 3 Apply ,4 Analyze, 5 Evaluate, 6 Create)

Q. No.	Questions	BTL
1(a)	What is transaction ? Discuss the properties & States of transaction	BTL-2
1(b)	What are deadlocks? Discuss deadlock detection and prevention mechanism in DBMS.	BTL-2
2(a)	Explain log based recovery with suitable example.	BTL-2
2(b)	What is serializability? Discuss different types of serializability techniques used in DBMS	BTL-2
3(a)	List various file organization methods & Explain different ways of organizing records in a file.	BTL-2
3(b)	Explain the following with suitable illustration. a) Types of failure. b) Time stamp based protocol. c) Shadow Paging. d) Transaction Atomicity e) Checkpoint mechanism	BTL-3
4(a)	Discuss different types of failures that occurs in the system? How are they recovered?	BTL-2
4(b)	Explain different concurrency problems and give solutions for it.	BTL-2
5(a)	Explain 2-phase locking protocol	BTL-2
5(b)	Discuss , how timestamp based protocol avoids the conflicts between transactions.	BTL-2

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