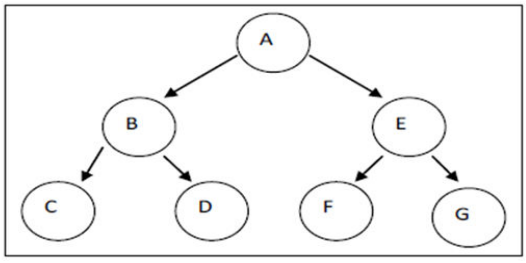
United College of Engineering and Research, Prayagraj

Database Management System (KCS-501)

Assignment-5

Q. No.	Question	CO	Bloom's level
1.	Discuss about deadlock prevention schemes.	CO5	L2
2.	What is deadlock? What are necessary conditions for it? How it can be detected and recovered?	CO5	L4
3.	Write the salient features of graph based locking protocol with suitable example.	CO5	L2
4.	What do you mean by multiple granularity? How the concurrency is maintained in this case. Write the concurrent transactions for the following graph. • T1 wants to access Item C in read mode • T2 wants to access item D in Exclusive mode • T3 wants to read all the children of item B • T4 wants to access all items in read mode 	CO5	L3
5.	What are multi version schemes of concurrency control? Describe with the help of an example. Discuss the various Time stamping protocols for concurrency control also.	CO5	L4
6.	What are the pitfalls of lock-based protocol?	CO5	L2
7.	Describe major problems associated with concurrent processing with examples. What is the role of locks in avoiding these Problems.	CO5	L2
8.	Explain the phantom phenomenon. Devise a time stamp based protocol that avoids the phantom phenomenon.	CO5	L2
9.	Define Exclusive Lock.	CO5	L1
10.	What is Two phase Locking (2PL)? Describe with the help of example.	CO5	L3