**Database Management System – cs422 DE**

**Assignment 8 – Week 12**

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**This assignment is based on lecture 10 (chapter 22 – Database Recovery).**

* Submit your *own work* on time. No credit will be given if the assignment is submitted after the due date.
* Note that the completed assignment should be submitted in .doc, .docx, .rtf or .pdf format only.
* In MCQs, if you think that your answer needs more explanation to get credit then please write it down.
* You are encouraged to discuss these questions in the Sakai forum.

1. What is meant by granularity? Give examples.  
   ANS:
2. Discuss the types of failure that may occur in a database environment. Explain why it is important for a multi-user DBMS to provide a recovery mechanism.

ANS:

1. Discuss how the log file (or journal) is a fundamental feature in any recovery mechanism. Explain what is meant by forward and backward recovery and describe how the log file is used in forward and backward recovery.

ANS:

1. What is the significance of the write-ahead log protocol? How do checkpoints affect the recovery protocol?

ANS:

1. Compare and contrast the deferred update and immediate update recovery protocols.

ANS: