CSE 4331/5331 Sample Test Questions

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Hoping to improve the performance, I am posting this sample test 2 questions. Hope it will improve your preparations for the test**. [n]** indicates points assigned.

1) There will a bunch of (10, 2 points each) T/F questions with justification on the pop quiz. Here is a sample T/F with justification question

   [1+1] Read locks can be released according to 2PL to ensure conflict serializability

2) **[4 each]** Check the following schedule for i) serializability, ii) conflict serializability, iii) recoverability, iv) avoiding cascading aborts

   a) w1[x] r2[y] w1[y] r2[u] w1[z] C1 W2[x] w2[y] C2
   b) w1[x] r2[y] w1[y] r2[u] w1[z] C1 W2[x] w2[y] C2

3) **[2]** in what way does index lock differ from strict 2PL?

4) [5] what kind of recovery does ARIES take care of (for each indicate the reason):

   i) power failure
   ii) program abort
   iii) someone tripping and disengaging power chord
   iv) disk crash
   v) building collapse (where the ONLY DBMS server is located)

5) **[6]** Briefly explain the purpose of CLR (Compensation log record) and when it is written, and for what purpose