SELECT correctness AS answer
FROM possible NATURAL JOIN solutions
WHERE open_book=1 AND open_notes=1 AND neighbor’s_test=0
GROUP BY yourself
HAVING some_blank_paper
LIMIT 50 minutes;

1. Determine which of the following schedules are conflict-serializable. Show the conflict graph for each.
   (a) $r_1(X), r_2(Z), r_3(X), r_1(Z), r_2(Y), r_3(Y), w_1(X), w_2(Z), w_3(Y), w_2(Y)$
   (b) $r_1(X), r_1(Y), w_1(X), r_2(Y), w_3(Y), w_1(Y), r_2(X)$

2. Insert the following values into an initially empty B-tree with parameter $n = 4$.
   19, 40, 37, 25, 23, 30, 15, 70, 42, 35, 5, 20, 60, 11, 17.

3. For each of the following relations and sets of functional dependencies, convert the relation into BCNF (if it is not already). Be sure to identify all keys.
   (a) relation $ABCDE$
      fd’s $A \rightarrow B$, $BC \rightarrow E$, $ED \rightarrow A$
   (b) relation $ABCDEF$
      fd’s $C \rightarrow BD$, $D \rightarrow EF$, $B \rightarrow A$
   (c) relation $ABCD$
      fd’s $A \rightarrow B$, $B \rightarrow D$, $B \rightarrow A$, $A \rightarrow C$
   (d) 551: relation $ABCD$
      fd $B \rightarrow D$ and mvd $AB \rightarrow C$, convert to 4NF.

simple grading scheme
1. 10 points
2. 15 points
4. 15/20 points
total: 40/45 points