## CS 4412 : Algorithm Analysis

## Homework Assignment \#19

Question 1 (4 points): Give the reduced cost matrix and the lower bound given the following distance matrix for the TSP problem.
$\begin{array}{llll}\infty & 7 & 3 & 12\end{array}$
$3 \quad \infty \quad 6 \quad 14$
$5 \quad 8 \quad \infty \quad 6$
$9 \quad 3 \quad 5 \quad \infty$
Question 2 (6 points): Question 9.3 from the book. See section 5.4 of the book for a definition of Set Cover.

