Name(s): $\qquad$
For the distance matrix shown below between the five taxa $A, B, C, D$, and $E$, construct unrooted trees using both (a) the UPGMA and (b) neighbor-joining methods. You can work in groups of up to 4 people. This is due Friday, February 19th.

$$
\left(\begin{array}{cccccc} 
& A & B & C & D & E \\
A & 0 & 6 & 7 & 10 & 15 \\
B & 6 & 0 & 5 & 8 & 13 \\
C & 7 & 5 & 0 & 7 & 12 \\
D & 10 & 8 & 7 & 0 & 7 \\
E & 15 & 13 & 12 & 7 & 0
\end{array}\right)
$$

