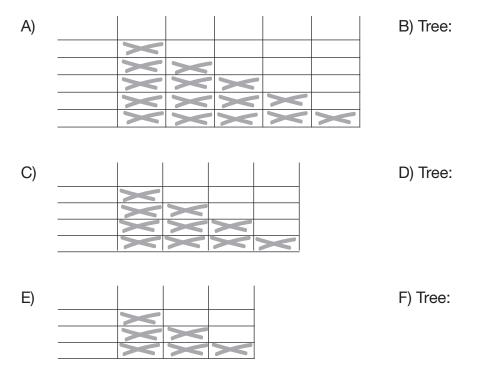# ForensicEA Lite Tutorial: Did the surgeon give hepatitis C to his patient? (Part 3)

Part 3: Evolutionary trees

5. Use the tables and spaces below to reconstruct the evolutionary tree you have produced with the Tree simulation. Use the tables to record pairwise differences between sequences sampled from the different virus populations, and use the spaces on the right to draw your trees.

A)

B) Tree:

C)

D) Tree:

E)

F) Tree:

Blank space for calculations:

6. How well did UPGMA do? Draw your true tree and your reconstructed tree below. Note any differences.

7. An evolutionary tree for HVC virions from the German orthopedic surgeon, his patient, and several local controls appears on page 21 of the ForensicEA Lite Tutorial. Examine the tree. Did the surgeon transmit hepatitis C to his patient? Explain.