- 1) Apply the like dissolves like rule to predict which of the following liquids is immiscible with water. C) acetone, C₃H₆O
 - A) acetic acid, CH3COOH B) methanol, CH₃OH
 - D) all of the above

E) none of the above

4-ethyl-4-methyloctane

Answer: E

- 2) Give the name of the following hydrocarbon
- a)

$$\begin{array}{c} \text{H}_{3}\text{C} - \text{CH}_{2} - \text{CH}_{2} \\ \text{CH}_{3} - \text{CH}_{2} - \text{CH}_{2} - \text{CH}_{2} - \text{C} - \text{CH}_{3} \\ \text{CH}_{3} - \text{CH}_{2} - \text{CH}_{2} - \text{CH}_{2} \end{array}$$

3) Draw the structure for:

b)

4-ethyl-2, 3-dimethyloctane