Percentage composition & Molecular formula

1. The percentage of oxygen in $NaOH$ is
   (a) 40 (b) 60
   (c) 8 (d) 10

2. The percentage of nitrogen in urea is about
   (a) 46 (b) 85
   (c) 18 (d) 28

3. If two compounds have the same empirical formula but different molecular formula, they must have
   (a) Different percentage composition
   (b) Different molecular weights
   (c) Same viscosity
   (d) Same vapour density

4. A compound (80 *g*) on analysis gave *C* = 24 g, *H* = 4 *g*, *O* = 32 *g*. Its empirical formula is
   (a) $C_2H_2O_2$ (b) C_2H_2O
   (c) CH_2O_2 (d) CH_2O

5. The empirical formula of a compound is CH_2O. 0.0835 moles of the compound contains 1.0 *g* of hydrogen. Molecular formula of the compound is
   (a) $C_2H_{12}O_6$ (b) $C_5H_{10}O_5$
   (c) $C_4H_8O_8$ (d) $C_3H_6O_3$

6. The empirical formula of an acid is CH_2O_2 , the probable molecular formula of acid may be
   (a) CH_2O (b) CH_2O_2
   (c) $C_2H_4O_2$ (d) $C_3H_6O_4$

7. In which of the following pairs of compounds the ratio of *C, H* and *O* is same
   (a) Acetic acid and methyl alcohol
   (b) Glucose and acetic acid
   (c) Fructose and sucrose
   (d) All of these