7. The structural formula of (G) is

(a) H₃CO OCH₃ → H_3CO OCH_3

(b) H_3CH_2CO OCH_3

(c) H_3CO OCH_3

(d) H_3CO OCH_3

8. Structural formula of I is
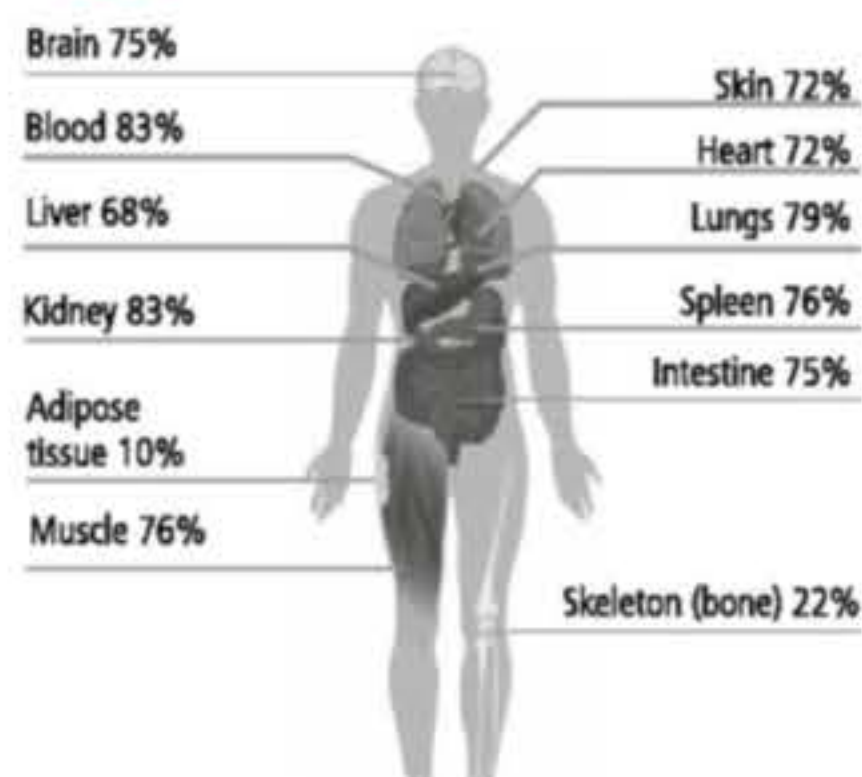
(a) CH_3 H_3CO OCH_3

(b) H_3CO OCH_3

(c) H_3CO OCH_2CH_3

(d) CH_3 H_3CO OCH_3
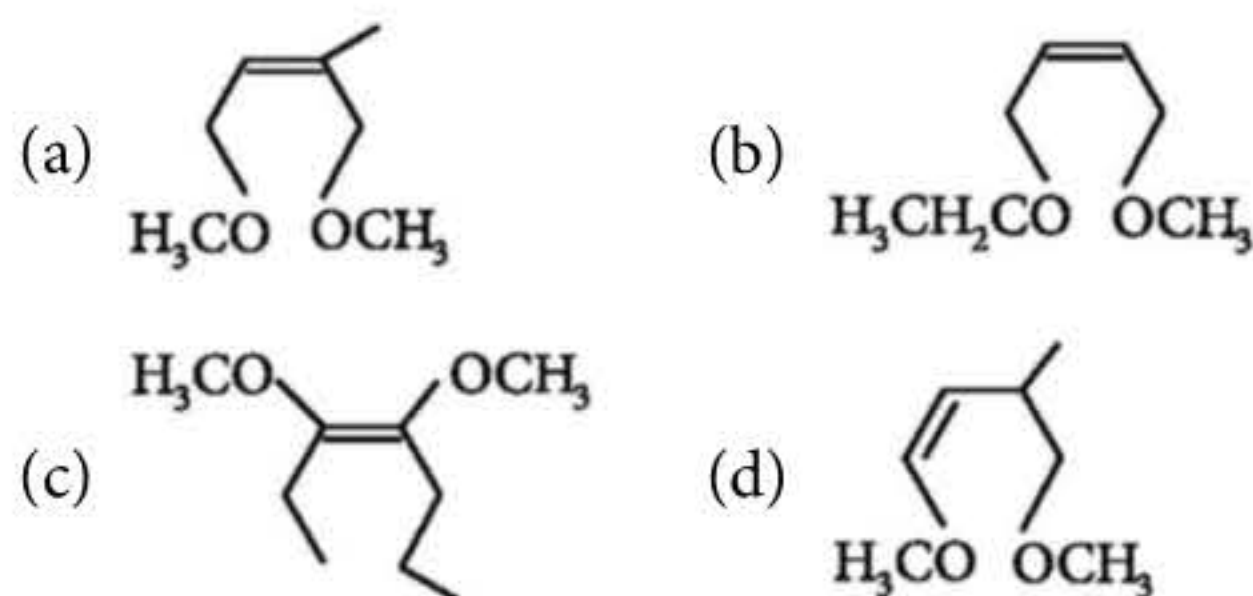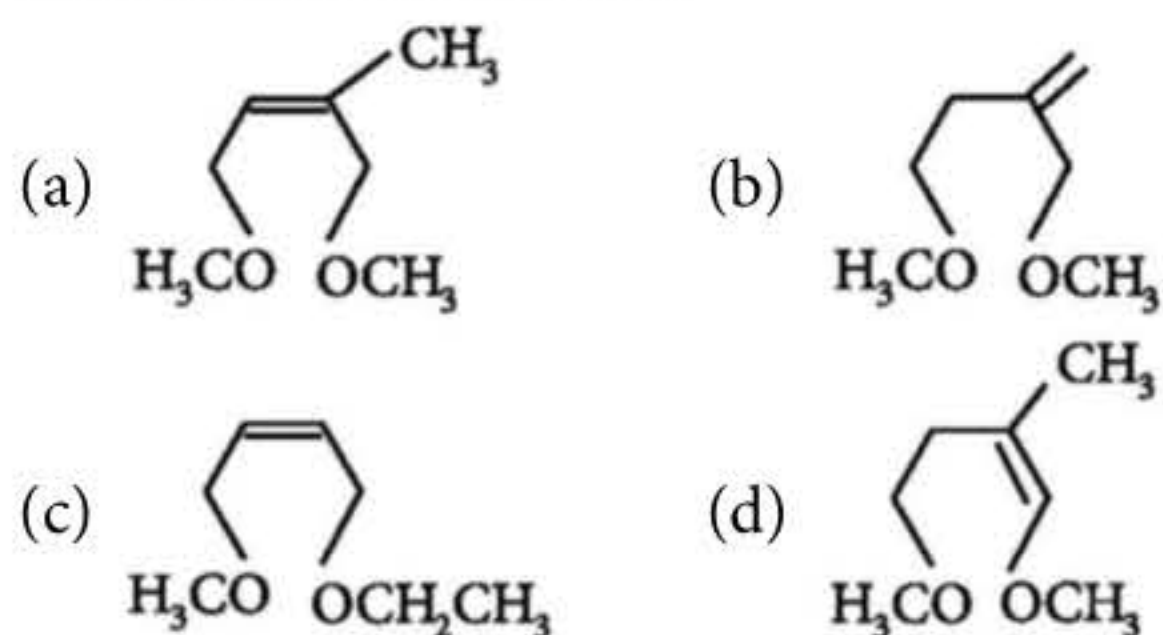
9. In a certain reaction B^{n+} is getting converted to $B^{(n+4)+}$ in solution. The rate constant of this reaction is measured by titrating a volume of the solution with a reducing agent which reacts only with B^{n+} and $B^{(n+4)+}$. In this process, it converts B^{n+} to $B^{(n-2)+}$ and $B^{(n+4)+}$ to $B^{(n-1)+}$. At $t = 0$, the volume of reagent consumed is 25 mL and at $t = 10$ min, the volume used is 32 mL. The rate constant for the conversion of B^{n+} to $B^{(n+4)+}$ is $x \times 10^{-2}$. Then the value of x is (Assume it to be a first order reaction)

10. How many compounds liberate NH_3 on heating from the following?
$(NH_4)_2SO_4$, $(NH_4)_2CO_3$, NH_4Cl, NH_4NO_3, $(NH_4)_2Cr_2O_7$

3 AMAZING FACTS YOU MUST KNOW

Brain 75%
Blood 83%
Liver 68%
Kidney 83%
Adipose tissue 10%
Muscle 76%

Skin 72%
Heart 72%
Lungs 79%
Spleen 76%
Intestine 75%
Skeleton (bone) 22%

Our brain contains about 73% water

The brain and heart are composed of about 73% water and the lungs are about 79% water. The skin contains 72% water, muscles and kidneys are about 79%, and even the bones are watery : 22%.

Generally, an adult male needs about 3 liters per day while an adult female needs about 2.2 liters per day. All of the water a person needs, does not have to come from drinking liquids, as some of this water is contained in the food we eat.

You cannot taste food without saliva

A person cannot taste food unless until it is mixed with saliva. For example, if strong-tasting substance like salt is placed on a dry tongue, the taste buds will not be able to taste it. Chemoreceptors in the taste buds of your tongue require a liquid medium in order for the flavors to bind into the receptor molecules. If you don't have liquid, you won't see results. Now, technically you can use water for this purpose rather than saliva. However, saliva contains amylase, an enzyme that acts on sugars and other carbohydrates, so without saliva sweet and starchy foods may taste different from what you expect.

bitter
sour sweet sour
sweet and salt

There is about 200 g of table salt (NaCl) in an average adult human body

The human body contains many salts, of which sodium chloride (common table salt) is the major one, making up around 0.4 per cent of the body's weight at a concentration pretty well equivalent to that in seawater. So a 50 kg person would contain around 200 g of sodium chloride – around 40 teaspoons. Since we lose salt whenever we sweat, it has to be continually replaced.