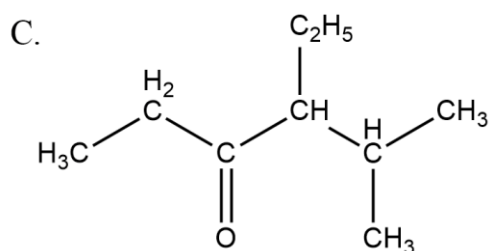
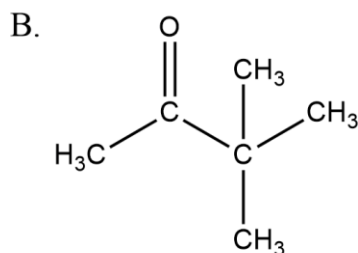
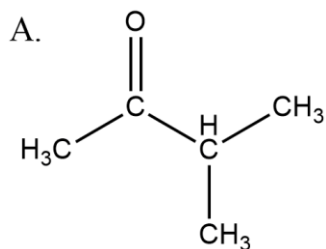


KETONES

1. Name the following ketone structures by using IUPAC system.



2. Write the structural formula for each of the followings.

- 2,2-dimethyl 3-hexanone
- 3-ethyl-4-methyl pentanone
- phenyl ethyl ketone
- diethyl ketone

3. Write equations for the preparation of the following compounds by using structural formulae of organic compounds.

- acetone from isopropyl alcohol
- butanone
- 3-pentanone by dehydrogenation

4. An aliphatic ketone with 10 hydrogen atoms is given. Try to draw all structural and functional isomers of this ketone and name them with IUPAC system.

5. What is the molecular formula of ketone which contains 18.6% oxygen atom by mass?

6. In a ketone ratio of mass of oxygen to hydrogen is 2. What is the structural formula of the ketone?

7. When a 18 g sample of a secondary alcohol is oxidized, 17.4 g of a ketone is produced. What is the molecular formula and name of the ketone?

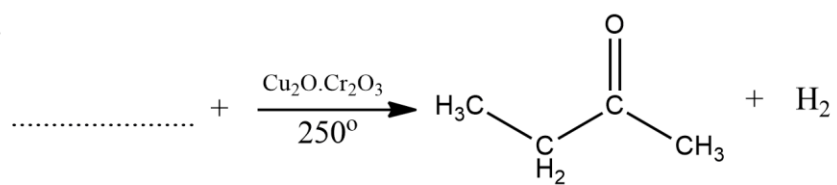
8. What are the mass and the structural formula of the alcohol which is used to obtain 28.8 g ketone and 8.96 L hydrogen gas at STP by dehydrogenation method?

9. A 30 g mixture of formaldehyde and acetone is allowed to react with 435 g of 40% Tollen's reagent. What is the percent by mass of acetone in the mixture?

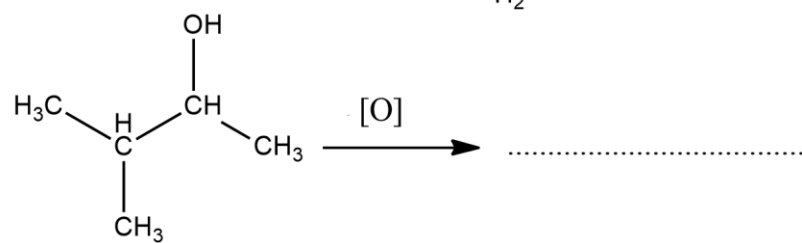
10. If a 10 g solution of pentanone is burnt 47.04 L of air at STP is required. What is the percent by mass of pentanone solution?

11. Complete the following reactions with structural formulae of organic substances.

A.



B.



C.

