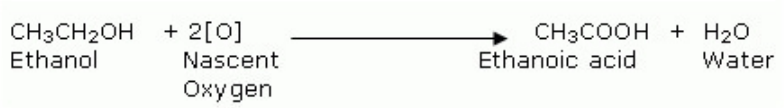
Question-7
How would you name the following compounds?
Solution:
i. Ethyl bromide
ii. Formaldehyde
iii. Hexyne

Question-8
Why is the conversion of ethanol to Ethanoic acid an oxidation reaction?
Solution:
The conversion of ethanol into ethanoic acid is called an oxidation reaction because oxygen is added to it during this conversion.



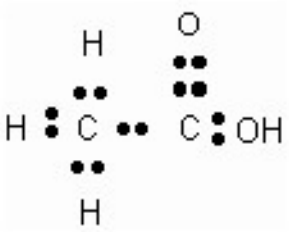
Question-9
A mixture of oxygen and ethyne is burnt for welding. Can you tell why a mixture of ethyne and air is not used?
Solution:
When a mixture of oxygen and ethyne is burnt, it burns completely producing a blue flame. This blue flame is extremely hot which produced a very high temperature which is used for welding metals. But the mixture of ethyne and air is not used for welding purposes because burning of ethyne in air produces a sooty flame, which is not enough to melt metals for welding.

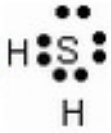
Question-10
What are oxidizing agents?
Solution:
Oxidizing agents are the substances that gain electrons in an redox reaction and whose oxidation number is reduced.

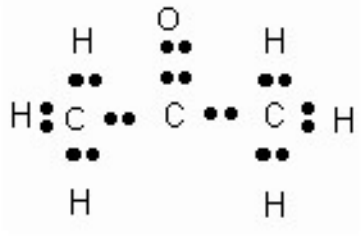
Question-11
Explain the nature of the covalent bond using the bond formation of CH_3Cl.
Solution:
CH_3Cl(methyl chloride) is made up of one carbon atom, three hydrogen atoms and one chlorine atom. Carbon atom has 4 valence electrons, each hydrogen atom has one valence electron, and a chlorine atom has 7 valence electrons. Carbon atom shares its four valence electrons with three hydrogen atoms and 1 chlorine atom to form methyl chloride as follows:

From the above reaction, in the dot structure of methyl chloride (CH_3Cl) there are four pairs of shared electrons between carbon and other atoms. Each pair of shared electrons constitutes one single covalent bond. So, methyl chloride has four single covalent bonds.

Question-12
Draw the electron dot structures for-
Solution:

i. Ethanoic acid 

ii. H_2S 

iii. Propanone 

iv. F_2 

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