

Question-1

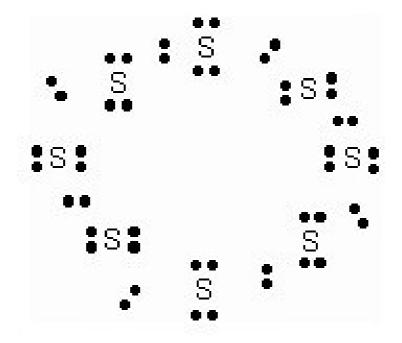
What would be the electron dot structure of carbon dioxide which has the formula ${\rm CO}_2$?

Solution:



Question-2

What would be the electron dot structure of a molecule of sulphur, which is made up of eight atoms of sulphur? (Hint – The eight atoms of sulphur are joined together in the form of a ring.) Solution:



Question-3

How many structural isomers can you draw for pentane? Solution:

We can draw 3 structural isomers for pentane.

Question-4

What are the two properties of carbon that lead to the huge number of carbon compounds we see around us? Solution:

Due to its large valency, carbon atoms can form covalent bonds with a number of carbon atoms as well as with a large number of other atoms such as hydrogen, oxygen, nitrogen, sulphur, chlorine and many more atoms. This leads to the formation of a large

number of organic compounds.

Question-5

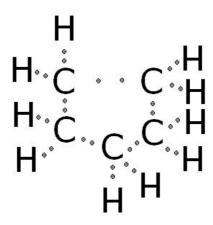
What will be the formula and electron dot structure of Cyclopentane?

Solution:

Formula of Cyclopentane

C₅H₁₀

Dot structure



Question-6

Draw the structures for the following compounds.

i. Ethanoic acid

ii. Bromopentane

iii. Butanone

iv. Hexanal

Solution:

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