

Science

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(Chapter – 4) (Structure Of The Atom)

(Class – IX)

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Question 1:

For the symbol H, D and T tabulate three sub - atomic particles found each of them.

Answer 1:

Symbol	Proton	Neutron	Electron
H	1	0	1
D	1	1	1

Question 2:

Write the electronic configuration of any pair of isotopes and isobars.

Answer 2:

Two isotopes of carbon are $^{12}_6\text{C}$ and $^{14}_6\text{C}$

The electronic configuration of $^{12}_6\text{C}$ is 2, 4.

The electronic configuration of $^{14}_6\text{C}$ is 2, 4.

[Isotopes have same electronic configuration]

$^{40}_{29}\text{Ca}$ and $^{40}_{18}\text{Ar}$ are a pair of isobars

The electronic configuration of $^{40}_{29}\text{Ca}$ is 2, 8, 8, 2

The electronic configuration of $^{40}_{18}\text{Ar}$ is 2, 8, 8.

[Isobars have different electronic configuration]