

21

2020 OCTOBER

DAY 295 - 071 WEEK 43

WEDNESDAY

10

October 2020

Wk	M	T	W	T	F	S	S
40				1	2	3	4
41	5	6	7	8	9	10	11
42	12	13	14	15	16	17	18
43	19	20	21	22	23	24	25
44	26	27	28	29	30	31	

10

Wk	M
44/43	30
45	2
46	9
47	16
48	23

APPOIN

APPOINTMENT / MEETING

Class VIII

Subject Chemistry

Chapter - 1 Atomic Structure part - 4

Date - 30.6.20

① What are isotopes?

Ans: Isotopes are the atoms of the same element with the same atomic no. but a different mass due to the difference in ~~neutrons~~ the no. of neutrons in their nucleus.

② Give three isotopes of hydrogen.

Protium (Ordinary hydrogen ${}^1_1\text{H}$)
One proton, One electron but no neutron.

Deuterium (Heavy hydrogen ${}^2_1\text{H}$) It has
One proton, one electron, One neutron.

Tritium (Very heavy hydrogen ${}^3_1\text{H}$) It
has one proton, one electron, two neutrons.

NOTES

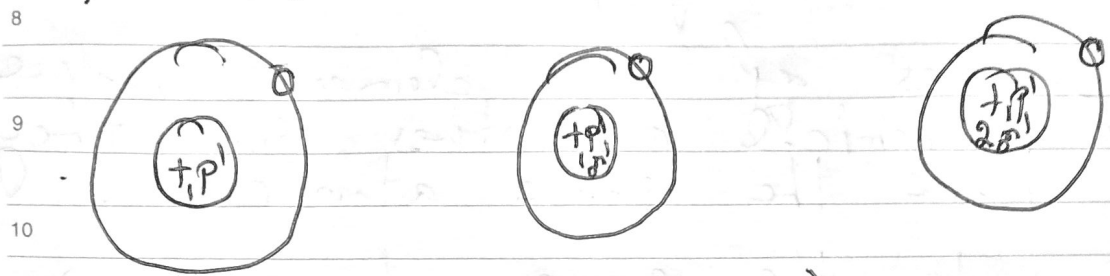
NOTES

F	S	S
2	3	4
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16	17	18
23	24	25
30	31	

November 2020						
Wk	M	T	W	T	F	S
44/49	30					1
45	2	3	4	5	6	7
46	9	10	11	12	13	14
47	16	17	18	19	20	21
48	23	24	25	26	27	28

APPOINTMENT / MEETING

Their structure

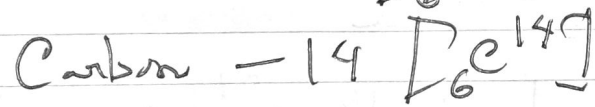
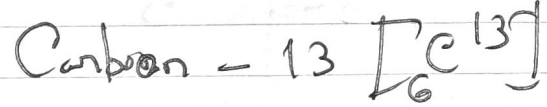
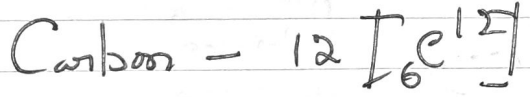


11 Protium ($1H^1$) Deuterium ($1H^2$) Tritium ($1H^3$)

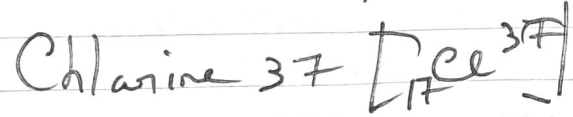
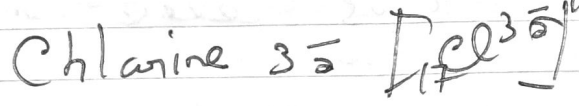
12 $p^+ = 1$ $e^- = 1$ $n^0 = 0$ $p^+ = 1$ $e^- = 1$ $n^0 = 1$ $p^+ = 1$ $e^- = 1$ $n^0 = 2$

1 ③ Give three isotopes of Carbon.

2 Carbon has three isotopes with mass no.



6 ④ Give two isotopes of Chlorine.



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44/45	30
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48	23

MENT / MEETING

APPOINT

What are the properties of isotopes?

Isotopes of an element have same chemical properties since they all have the same atomic no.

Due to the same atomic no., all the isotopes of an element have the same electronic configuration.

Isotopes differ from each other by their physical properties such as density, melting point, boiling point, etc. due to the difference in their mass no.

What are the drawbacks of Dalton's atomic theory?

The drawbacks are

Atoms are not indivisible, they can be further divided into fundamental particles electrons, protons and neutrons.

Every atoms are not identical. Isotopes are the atoms of same element with same atomic no. but different mass no. that

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NOTES

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November 2020

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48	23	24	25	26	27	28	29

APPOINTMENT / MEETING

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8 news they have the same no. of protons and electrons but differ in their no. of neutrons.

10 Home task

- 11
- ① Define the term
 (a) Atomic no. (b) Mass no.
- ② State mass no. , no. of protons and no. of electrons for the following
- 2 $^{14}_6\text{C}$, $^{23}_{11}\text{Na}$, $^{40}_{20}\text{Ca}$, $^{39}_{14}\text{K}$, $^{32}_{16}\text{S}$
- 3