

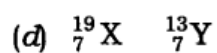
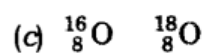
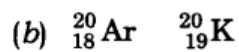
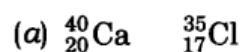


MORE -QUESTIONS SOLVED

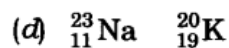
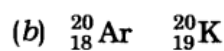
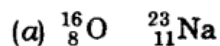
I. Multiple Choice Questions

Choose the correct option:

- The nucleons are
 - protons and electrons
 - neutrons and electrons
 - protons and neutrons
 - none of these
- The isotope deuterium of hydrogen has
 - no neutrons and one proton
 - one neutron and two protons
 - one electron and two neutron
 - one proton and one neutron
- The electrons present in the outermost shell are called
 - valency electrons
 - octate electrons
 - duplet electrons
 - valence electron
- An α -particle contains
 - 4 positive charge and 2 mass unit
 - 2 positive charge and 4 mass unit
 - 2 positive charge and 2 mass unit
 - 4 positive charge and 4 mass unit
- The atomic number of sodium is 11 and its mass number is 23. It has
 - 11 neutrons and 12 protons
 - 12 protons and 11 electrons
 - 11 electrons and 12 neutrons
 - 12 electrons and 11 neutrons
- The electronic configuration of chlorine is
 - 2, 7
 - 2, 8, 8, 7
 - 2, 8, 7
 - 2, 7, 8
- The isotope used to remove the brain tumours and treatment of cancer is
 - U-235
 - Na-24
 - Iodine
 - Co-60
- The isobars among the following is



- The elements with same valence electrons and form same type of ions



10. In the α -scattering experiment, few α -particles rebounded because

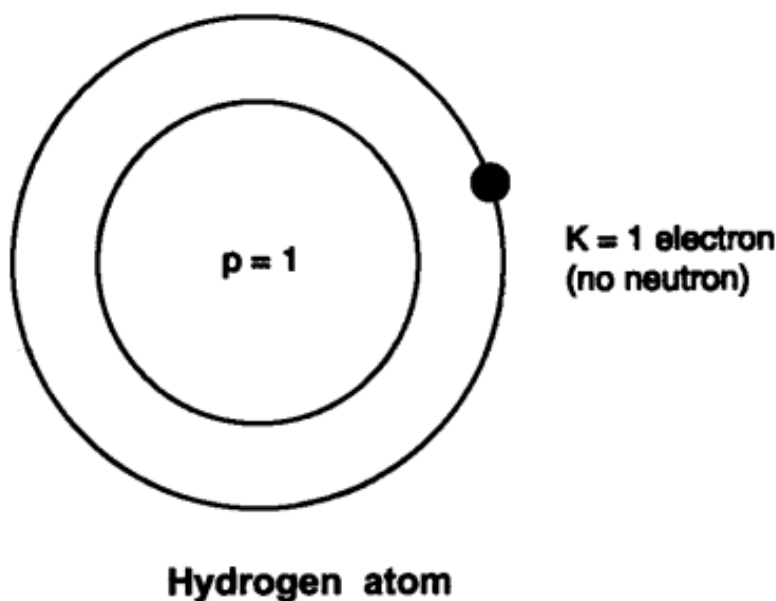
- (a) Most of the space in the atom is occupied.
- (b) Positive charge of the atom occupies very little space.
- (c) The mass of the atom is concentrated in the centre.
- (d) all positive charge and mass of the atom is concentrated in small volume.

Answer: 1—(c), 2—(d), 3—(d), 4—(b), 5—(c), 6—(c), 7—(d), 8—(b), 9—(d), 10—(d).

II. Very Short Answer Type Questions

Question 1. Draw the atomic structure of hydrogen atom.

Answer:



Question 2. Why are some elements chemically inert?

Answer: Because their outermost shell is completely filled.

Question 3. Why is atom electrically neutral?

Answer: It has same number of protons and electrons, (positive charge = negative charge).

Question 4. What is the charge and mass of α -particles?

Answer: Charge is + 2

Mass is 4 a.m.u.

Question 5. What are valence electrons?

Answer: Electrons present in the outermost shell of an atom are called valence electrons.

Question 6. An atom has atomic number 12, what is its valency and name the element?

Answer: Atomic number = 12

\therefore Protons = Electrons = 12 Electrons Configuration = K L M -2 8 2

\therefore Valency = 2

Element is magnesium.

Question 7. Find the number of neutrons in ${}^{27}_{13}\text{X}$.

Answer: Mass number = 27

$\therefore p + n = 27$ $p = 13$, (Atomic No. = Number of protons)

$\therefore 13 + n = 27$

$\therefore n = 14$

\therefore Neutron = 14

Question 8. Where is the mass of atom concentrated?

Answer: Mass of an atom is concentrated in nucleus.

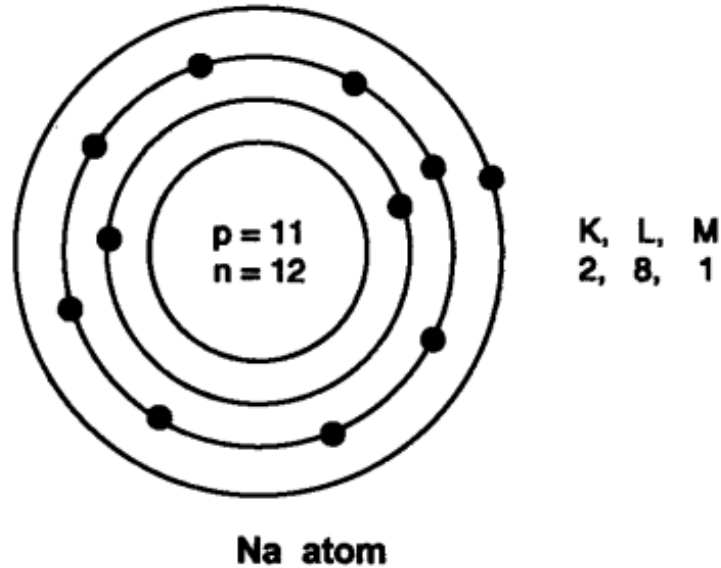
Question 9. Name two elements with same number of protons and neutrons?

Answer: Carbon (Protons = Neutrons = 6)

Oxygen (Protons = Neutrons = 8)

Question 10. Draw the atomic structure of sodium atom.

Answer:



Question 11. Name the isotope used for treatment of cancer.

Answer: Isotope of cobalt.

Question 12. AZX What does this symbol represent?

Answer: X → Symbol of element

A → Mass number

Z → Atomic number

Question 13. Can the value of 'Z' be same for two different atoms?

Answer: No, (Z = atomic number), two different atoms cannot have same atomic number.

Question 14. Can the value of A' be same for two different atom?

Answer: Yes, it can be e.g. Ca and Ar has A - 40 (i.e., mass number).

***** END *****