Yakeen NEET 2.0 2026

DPP SOLUTION

- Subject – Physical Chemistry
- Chapter – Some Basic Concept of Chemistry

DPP No.- 01

By – Amit Mahajan Sir

Question-1

In an atom $^{27}_{13}Al$ number of protons is(a) electron is (b) and neutron is (c).

Hence ratio will be in order c : b : a

1. 13 : 14 : 13
2. 13 : 13 : 14
3. 14 : 13 : 13
4. 14 : 13 : 14

b e n

A - Z = 27 - 13 = 14

c : b : a

n : e : p

14 : 13 : 13

Ans. (3)

Question-2

A and B are two elements which have same atomic weight and are having atomic number 27 and 30 respectively. If the atomic weight of A is 57 then number of neutrons in B is

1. 27
2. 33
3. 30
4. 40

$^{57}_{27}A$

$^{57}_{30}B \rightarrow n = A - Z = 57 - 30 = 27$

Ans. (1)

Question-3

Number of protons, neutrons and electrons in the element $^{231}_{89}X$ is

1. 89, 231, 89
2. 89, 89, 242
3. 89, 142, 89
4. 89, 71, 89

p, n, e⁻

89, 142, 89

$n = A - Z = 231 - 89 = 142$

Ans. (3)

Question-4

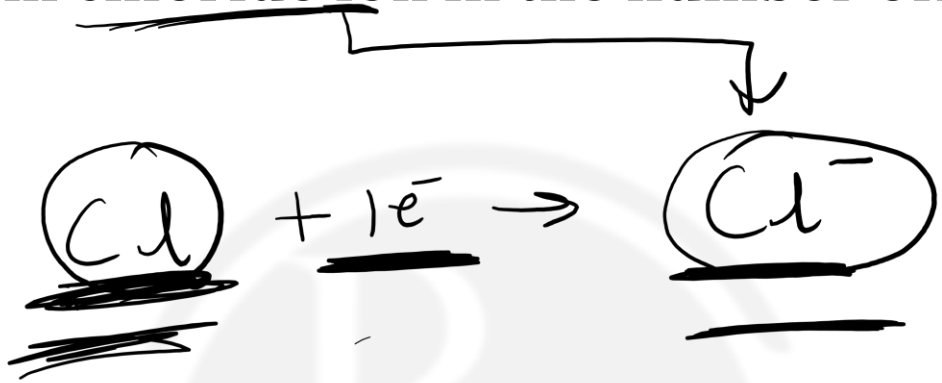
The nitrogen atom has 7 protons and 7 electrons, the nitride ion (N^{3-}) will have:

1. 7 protons and 10 electrons
2. 4 protons and 7 electrons
3. 4 protons and 10 electrons
4. 10 protons and 7electrons

Ans. (1)

Question-5

Chlorine atom differs from chloride ion in the number of:



1. Proton only
2. Neutron only
3. Electrons only
4. Protons and electrons

Ans. (3)

Question-6

Number of neutrons in 1 molecule of CO_2 are

^{12}C → 6 ✓ ; ^{16}O → 8 ✓

$n = (12-6) \times 1 + (16-8) \times 2 = 6 + 16 = 22$

1. 22
2. 20
3. 12
4. 16

Ans. (1)

Question-7

Sum of proton, electron and neutron in 1 molecule of $H_2S_2O_8$.

1 H 32 S 16 O

98 + 98 + 96 = 292

p + e + n

1 × 2
+
16 × 2
+
8 × 8

(1 − 1) × 2
+
(32 − 16) × 2
+
(16 − 8) × 8

1. 290
2. 292
3. 294
4. 296

Ans. (2)

Question-8

In the nucleus of $_{20}Ca^{40}$ there are

1. 40 protons and 20 electrons
2. 20 protons and 40 electrons
3. 20 protons and 20 neutrons
4. 20 protons and 40 neutrons

nucleus → protons + neutrons

20 + (40 − 20) = 40

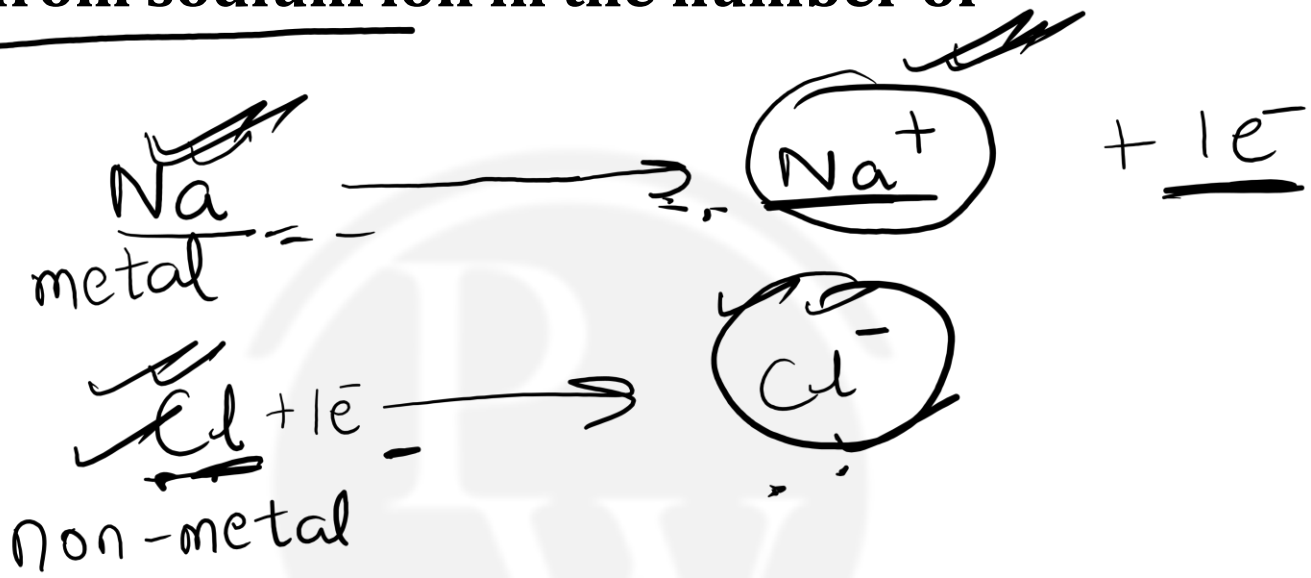
nucleons

Ans. (3)

Question-9

Sodium atom differs from sodium ion in the number of

1. Electron
2. Protons
3. Neutrons
4. Does not differ



Ans. (1)

Question-10

The number of electrons in $[_{19}K^{40}]$ is

1. 19
2. 20
3. 18
4. 40

$p = 19 = e^-$

Ans. (1)

Question-11

Name the particles which make up matter

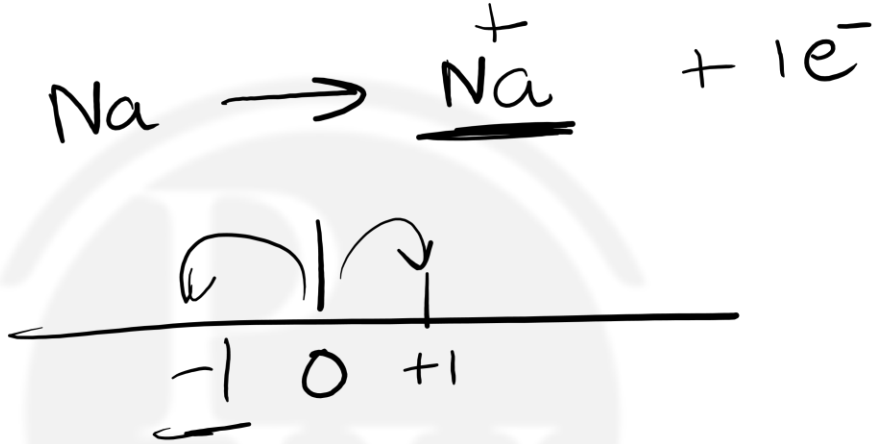
1. Non-metals
2. Metals
3. Metalloids
4. Atoms

Ans. (4)

Question-12

An atom which has lost one electron would be

1. Negatively charged
2. Positively charged
3. Electrically neutral
4. Carry double positive charge

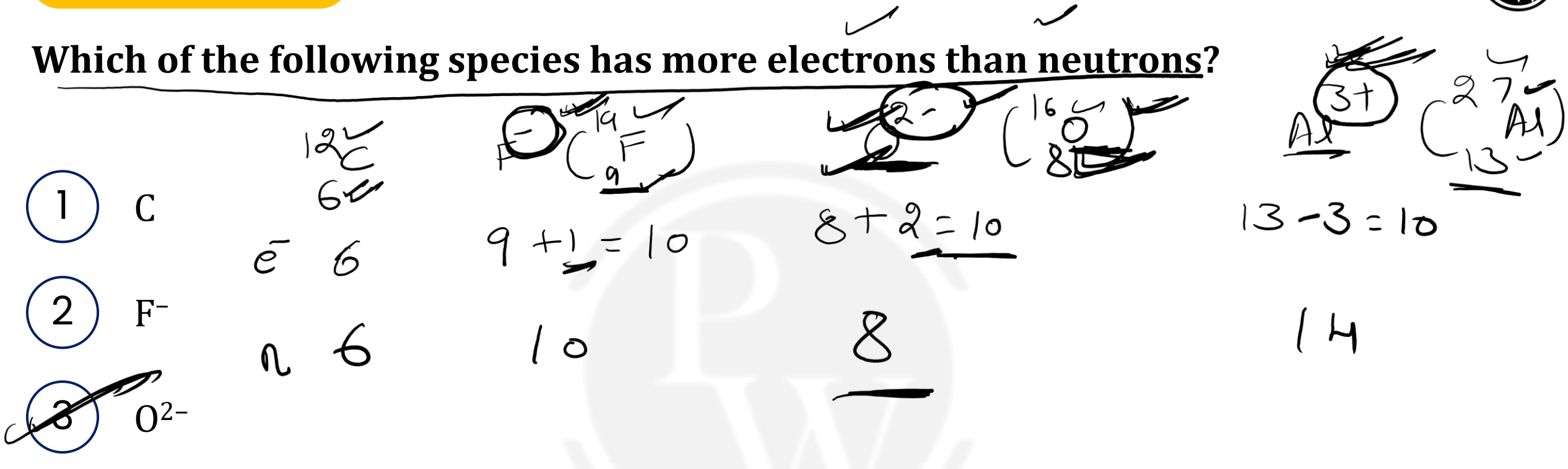


Ans. (2)

Question-13

Which of the following species has more electrons than neutrons?

1. C
2. F^-
3. O^{2-}
4. Al^{3+}



Ans. (3)

Question-14

Nitrogen atom has an atomic number of 7 and oxygen has an atomic number 8 . The total number of electrons in a nitrate ion (NO_3^-) will

1. 8
2. 16
3. 32
4. 64

$_7N$ $_8O$

$p = 7 \times 1 + 8 \times 3 = 31$

$e^- = 31 + 1 = 32$

Ans. (3)

Question-15

The atomic number of an element represents

1. Number of neutrons in the nucleus
2. Number of protons in the nucleus
3. Atomic weight of element
4. Valency of element

Ans. (2)

Thank You...