

NEW STANDARD ACADEMY

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CLASS 11 (Chemistry) DPP (Academy)14-05-2024

1. Following are the p-block elements:

1.

<i>Ge</i>	<i>As</i>	<i>Se</i>
32	33	34

If each orbital can take maximum of three electrons and in the absence of Aufbau rule, specify the

- a) Block b) Group c) Period of the above Elements

2. Elements A, B, C and D have the following electronic configurations:

- a. A: $1s^2, 2s^2, 2p^1$ B: $1s^2, 2s^2, 2p^6, 3s^2, 3p^1$
b. C: $1s^2, 2s^2, 2p^6, 3s^2, 3p^3$ D: $1s^2, 2s^2, 2p^6, 3s^2, 3p^5$

3. Last electron in Lu(71) goes into 5d, but it is studied in f-block.

Explain

4. Element with electronic configuration $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^6 4d^{10} 5s^2 5p^3$ belongs to which of the following group of the periodic table?

5. In Lothar Meyer plot of atomic volume versus atomic mass, the peaks are occupied by

6. A new element discovered has been named Eka-Aluminium. Its atomic number and symbol respectively are

7. Electronic configurations of elements (ground state or excited states) are given

- a) $[Ar] 4s^1 3d^2$ b) $1s^2 2s^2 sp^5 3s^1$
c) $[Ar] 3d^{10} 4s^1$ d) $[Xe] 4f^{14} 6s^2$

8. Without looking at the periodic table select the elements of IIIA group of the periodic table. (atomic numbers are given):

- a) 3, 11, 19, 37 b) 5, 13, 21, 39

c) 7, 15, 31, 49

d) 5, 13, 31, 49

9. Which set does not show correct matching?

- a) $Sc^{3+} [Ne] 3s^2 3p^6$ Zero group
b) $Fe^{2+} [Ar] 3d^6$ VIII group
c) $Cr [Ar] 3d^5 4s^1$ VIB group
d) All of the above

10. Valence electrons in the element A are 3 and that in element B are

6. Most probable compound formed from A and B is?