

Periodic Classification of Elements

- 1. An element with $Z=20$ will be placed in which period of the periodic table? (CBSE2001)**
1) 4 2) 3 3) 2 4) 1
- 2. If the atomic number of an element is 33, it will be placed in the periodic table in the (MLNR)**
1) First group 2) Third group
3) Fifth group 4) Seventh group
- 3. The electronic configuration of chromium in its ground state I (E-1997)**
1) $[\text{Ar}] 4d^4 4s^2$ 2) $[\text{Ar}] 4d^5 4s^1$
3) $[\text{Ar}] 3d^4 3s^2$ 4) $[\text{Ar}] 3d^5 4s^1$
- 4. As per the modern periodic law, the physical and chemical properties of elements are periodic functions of their (E-1998)**
1) atomic number 2) electronic configuration
3) atomic weight 4) atomic size
- 5. The number of periods present in the long form of the periodic table (E-1999)**
1) 6 2) 7 3) 8 4) 18
- 6. The electronic configuration of group III elements is (E-2000)**
1) $ns^2 np^3$ 2) $ns^2 np^5$ 3) $ns^2 np^1$ 4) $ns^2 np^2$
- 7. Which of the following pairs of ions have the same electronic configuration (E-2002)**
1) $\text{Cr}^{+3}, \text{Fe}^{+3}$ 2) $\text{Fe}^{+3}, \text{Mn}^{+2}$ 3) $\text{Fe}^{+3}, \text{Co}^{+3}$ 4) $\text{Sc}^{+3}, \text{Cr}^{+3}$
- 8. Which one of the following is correct about stability of the given ions (E-2003)**
1) $\text{Pb}^{2+} > \text{Pb}^{4+}$ 2) $\text{Pb}^{4+} > \text{Pb}^{2+}$
3) $\text{Si}^{2+} > \text{Si}^{4+}$ 4) $\text{Sn}^{4+} > \text{Sn}^{2+}$
- 9. Which of the following is not an actinide? (DPMT2005)**
1) Curium 2) Californium 3) Uranium 4) terbium
- 10. Europium is: (DPMT2005)**
1) s-block (2) p-block 3) d-block 4) f-block
- 11. Element with atomic number 56 belongs to which block? (AFMC2002, 09)**
1) s 2) p 3) d 4) f
- 12. which of the following sets is of coinage metals? (DPMT2003)**
1) Cu, Ag, Au 2) Zn, Cd, Hg 3) Au, Ag, Zn 4) Li, Na, K

13. An element X belongs to fourth period and fifteenth group of the periodic table. Which of the following is true regarding the outer electronic configuration of X? It has: (PMT2008)

- 1) Partially filled d-orbital's and completely filled p-orbital
- 2) completely filled s-orbital and completely filled p-orbital's
- 3) completely filled s-orbital's and half filled p-orbital's
- 4) half-filled d-orbital's and completely filled s-orbital

KEY

- 1)2 2)3 3)4 4)2 5)2 6)3 7)2 8)1
9)4 10)4 11)1 12)1 13)4