

PERIODIC CLASSIFICATION OF ELEMENTS AND BONDING

1. The compound containing both ionic and covalent bond is
(1) AlBr_3 (2) CaO (3) MgC_{12} (4) NH_4Cl
2. The element that cannot be used as a reducing agent is
(1) carbon (2) aluminium (3) sulphur (4) sodium
3. *Assertion (A)* : Nitrate ores are rarely available.
Reason (R) : Bond dissociation energy of nitrogen is very high. 2015
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are correct but R is not the correct explanation of A.
(3) A is correct and R is false.
(4) Both A and R are false.
4. An element with atomic number 17 is placed in the group 17 of the long form periodic table. Element with atomic number 9 is placed above and with atomic number 35 is placed below it. Element with atomic number 16 is placed left and with atomic number 18 is placed right to it. Which of the following statements are correct? 2014
(a) Valency of the element with atomic number 18 is zero
(b) Elements with same valency will have atomic number 16, 17 and 18
(c) Valency of elements with atomic number 9, 17 and 35 is one
(d) Element with atomic number 17 is more electronegative than element with atomic numbers 16 and 35
(1) a, b and c (2) a, c and d (3) b, c and d (4) a, b and d
5. An element X has 7 electrons in its L shell. What is true about the element X? 2013
I. It belongs to period 9 of modern periodic table.
II. Its atom contains 9 protons.
III. It has a valency of 7.
IV. Its atoms can accept an electron to acquire noble gas configuration. -.
(1) (I) and (II) (2) (II) and (III) (3) (III) and (IV) (4) (II) and (IV)
6. An element X combines with hydrogen to form a compound XH_3 . The element X is placed on the right side of the periodic table. What is true about the element X?
(A) Has 3 valence electrons
(B) Is a metal and is solid
(C) Is a non-metal and is a gas

(D) Has a 5 valence electrons

(E) XH_3 reacts with water to form a basic compound

(1) A, B and C (2) B, C and D (3) C, D and E (4) E, A and B

ANSWER KEYS

1.4

2.3

3.2

4.2

5.4

6.3

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