

PERIODIC TABLE

PRACTISE SET-1

F.M: 30

1. Fill in the blanks:

- a. Ionisation potential _____ across a period and _____ down a group.
- b. All the lanthanides and actinides belong to _____ group in the periodic table.
- c. _____ possess the highest E.N and _____ possess the highest E.A.
- d. _____ the nuclear charge, _____ non-metallic is the element.
- e. Solid member of group 17 is _____.
- f. The smallest noble gas is _____.
- g. Special name given to group 16 elements is _____.

[10]

2. Answer the following:

- a. What are the factors which control the Ionisation potential?
- b. Arrange the following :
 - i. B, O, Li, N (increasing I.P)
 - ii. Rb, Na, Li, Cs (increasing I.P)
 - iii. Mg, Cl, Si, Na (decreasing I.P)
- c. What is electron affinity? How it changes across the period?
- d. Arrange the following:
 - i. S, Al, Mg, P (increasing E.A)
 - ii. I, F, Br, Cl (decreasing E.N)
 - iii. O, Be, C, N (Increasing reducing property)
 - iv. Cs ,Rb, Na, Li (Increasing atomic size)
 - v. B, N,O, Li, (increasing Metallic property)

[1+3+2+5]

3. In the third period, the element with smallest atomic size is-

- (a) Sodium (b) Chlorine (c) Magnesium (d) Oxygen

[1]

4. Element A is placed in group 17 and B in group 2. Now between A and B, identify the element which possess-

- i. Highest atomic size.
- ii. Lowest ionization potential.
- iii. Highest non-metallic nature.

[3]

5. How the following properties changes (increases or decreases) across the period:

- i. Reducing nature.
- ii. Electronegativity.
- iii. Ionisation Potential

[3]

6. Explain why?

- i. Atomic size increases from group 17 to 18.
- ii. I.P decreases down the group.

[2]

PERIODIC TABLE

PRACTISE SET-2

F.M: 30

1. Arrange the following:

- i. Cl, Al, Na, P (Increasing electronegativity)
- ii. CaO, SiO₂, K₂O, Al₂O₃ (Increasing basic character)
- iii. I, Br, F, Cl (decreasing metallic nature)
- iv. C, B, Li, F (decreasing atomic size)
- v. K, Li, Na (increasing Ionisation potential)
- vi. Mg, Li, K, Al(increasing metallic character)
- vii. N,O,Cl,Be(increasing E.N)
- viii. Cl,N,si,C(increasing atomic radius)
- ix. Ca,Al,K,Li(increasing reducing power)

[9]

2. Answer the following with respect to the following modern periodic table:

A							B
C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R

- i. Arrange D,I,C,G in increasing order of metallic character.
- ii. Arrange M,Q,K,O in decreasing order of ionisation potential.
- iii. The nature of bond present in LI₂

[3]

3. Answer the following with respect to the following modern periodic table:

A							B
	C	D		E		G	H
		I	J			K	L
M	N						

- i. Element with strongest reducing power.
- ii. Element with highest E.A
- iii. Two elements of different group with similar chemical property.
- iv. Group number of J
- v. Formula of the compound between E and N.

[5]

4. Answer the following with reference to the modern periodic table:

- i. Name the second element of period 3
- ii. How many elements are present in period 4
- iii. Name the elements having the highest E.A
- iv. Name the most E.N element
- v. Name the non-metallic element of group 1

[5]

5. In period 3, element A is to the right of element of element B.

- i. The element A would have a _____ atomic size than B.
- ii. The element B would have _____ ionisation potential than A.
- iii. The element A would have a _____ E.N than B.

[3]

6. Answer the following with respect to the following modern periodic table:

Group No	1	2	13	14	15	16	17	18
2 nd Period	Li		D			O	J	Ne
	A	Mg	E	Si		H	M	
	R	T	I		Q	U		Y

- i. Identify the most E.N element.
- ii. Identify the most reactive element of group 1
- iii. Identify the element from period 3 with least atomic size.
- iv. How many valence electrons are present in Q
- v. Which element from group 2 would have the least I.P.

[5]