

DPP

DAILY PRACTICE PROBLEMS

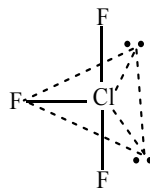
Class : XIth
Date :

Solutions

Subject : CHEMISTRY
DPP No. : 10

Topic :- Classification of Elements & Periodicity in Properties

- 1 (d)
Born-Haber cycle inter-relates the various energy terms involved in ionic bonding.
- 2 (c)
Follow bonding rules.
- 3 (b)
Alkali metals are most electropositive elements.
- 4 (b)
In H₂O, H-atom contains only two electrons.
- 5 (b)
Fluorine is more reactive than chlorine, bromine and iodine
- 6 (b)
Due to H-bonding in NH₃.
- 7 (d)
The order of screening effect for a given shell electrons is $s > p > d > f$.
- 8 (a)
The ionisation energy of elements decreases down the group.
- 9 (c)
Cl in ClF₃ has sp^3d -hybridization



- and possesses two axial Cl—F bonds and one equatorial bond. Two lone pairs are at equatorial position give rise to bent 'T' shape to ClF₃.
- 10 (b)
In like atoms, electronegativity difference is zero.
 - 11 (c)
S₂ molecule is paramagnetic like O₂ having 2 unpaired electrons.
 - 13 (d)
Along the period acidic strength of oxide increases
 - 14 (c)

- In order to belong with the same family, the outer configuration must be the same
- 15 **(b)**
 Mn^{2+} is most stable as it has half filled d -orbitals.
- 16 **(b)**
The atomic radius decreases along the period. Also cations are always smaller than their parent atom and anions are always larger than their parent atom .
- 17 **(d)**
 $\text{S} = \text{C} = \text{S}$.
- 18 **(d)**
Cation radius increases down the group.
- 19 **(d)**
Cyanide ion is,
 $-\bar{\text{C}} \equiv \text{N} \rightarrow -\bar{\text{N}} \equiv \text{C}$.
- 20 **(a)**
All are isoelectronic species; more is nuclear charge smaller is ionic size.

PE

ANSWER-KEY

Q.	1	2	3	4	5	6	7	8	9	10
A.	D	C	B	B	B	B	D	A	C	B
Q.	11	12	13	14	15	16	17	18	19	20
A.	C	D	D	C	B	B	D	D	D	A

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