

CLASS- VIII

SUBJECT- CHEMISTRY

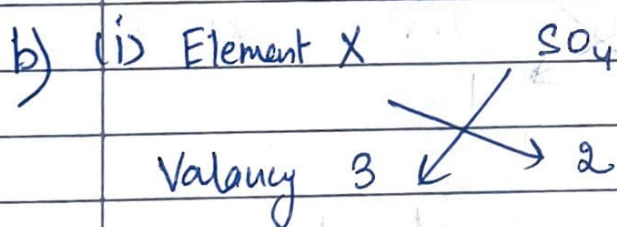
CHAPTER- 4

TEACHER- ANAMIKA

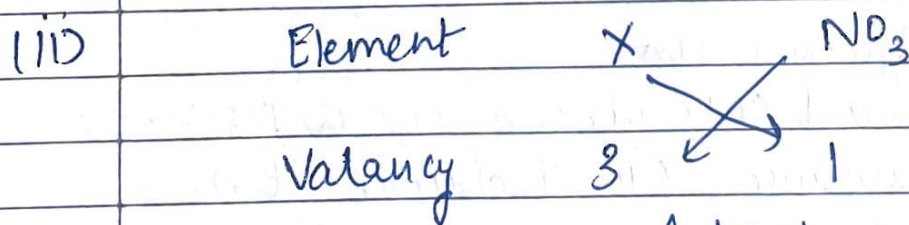
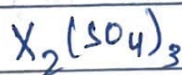
Q:-1 a) An element X has three electrons more than the noble gas configuration. What type of ion will it form?

- b) Write the formula of its X (i) Sulphate
 (ii) Nitrate (iii) Phosphate (iv) Carbonate
 (v) Hydronide

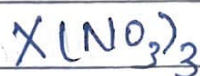
Ans:- a) Element X ~~may~~ belongs to group 13 for e.g. Al. It forms cation, Al^{3+}



Interchange of Valency



Interchange of Valency



(iii)

Element

X

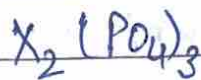
 PO_4

Valency

3

2

Interchange of Valency



(iv)

Element

X

 CO_3

Valency

3

2

Interchange of Valency



(v)

Element

X

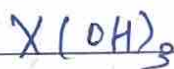
OH

Valency

3

1

Interchange of Valency



Q2. Compare

a) Sodium atom & Sodium ion

b) Chlorine atom and Chloride ion, with respect to
(i) atomic structure, (ii) electrical stateAns:- a) $\text{Na} \rightarrow 11$

Electronic Configuration

K L M

2, 8, 1

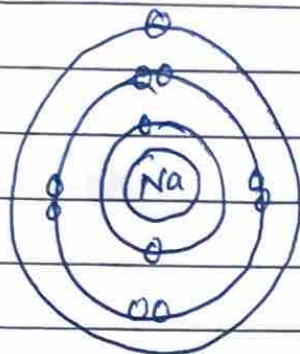
It is neutral atom

Na⁺

Electronic Configuration

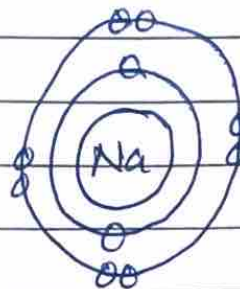
K	L	M
2	8	0

It is ^{an} ionic / cationic form



Na

(2, 8, 1)



Na⁺

(2, 8)

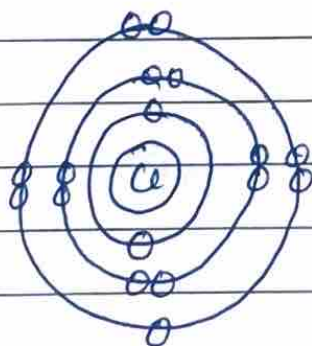
b)

Cl	→	K	L	M
(17)		2	8	7

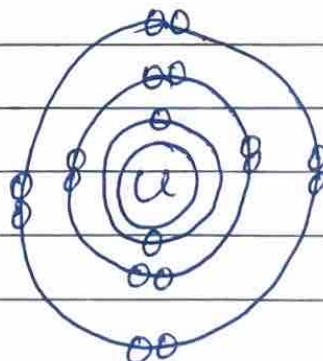
It is neutral atom

Cl ⁻	→	K	L	M
		2	8	8

It is ionic / anionic



(Cl atom)



(Cl⁻ ion)