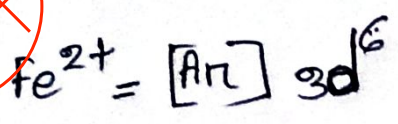


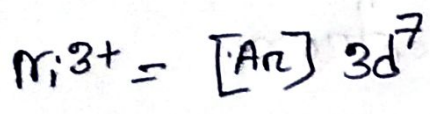
6



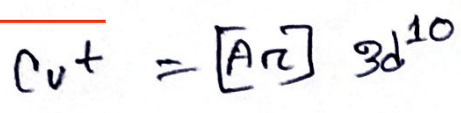
Four unpaired electrons

Cr (24)

6 unpaired e^- s



Three unpaired electrons



no unpaired electrons

So Fe^{2+} has maximum number of unpaired d-block element All are ion

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(i) $n=4$

$l = n-1 = 3$

$m = 4, 3, 2, 1, 0, -1, -2, -3, -4$

$-\frac{1}{2}$ is a spin quantum num

(i) and (ii) both are correct

(incorrect)

~~8~~ $Mg = 1s^2 2s^2 2p^6 3s^2$
~~2~~ $n=1, 2$ level filled
 $n=3$ level has 2 electron

~~9~~ $l=2$ s, p orbital
 electron = $2+6 = 8$

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~~10~~ (a) (i) Noble gas - ~~Ar (Ne)~~
 Halogen - ~~F (Cl)~~

(b) ~~B (Na)~~ and ~~IF (Cl)~~
~~NaCl~~ ionic compound

(c) ~~C (Mg)~~ and ~~E (O)~~

~~O(8) = $1s^2 2s^2 2p^4$~~

~~Mg(12) = $1s^2 2s^2 2p^6 3s^2$~~