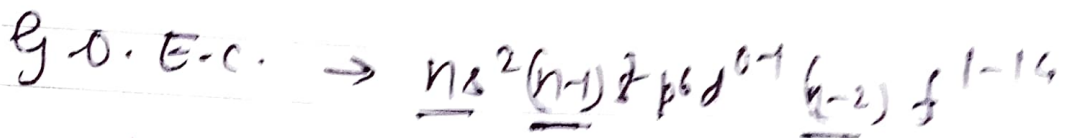


FEBRUARY						
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

f-block elements

These elements in which last electron enters in f-subshell are called f-block elements.

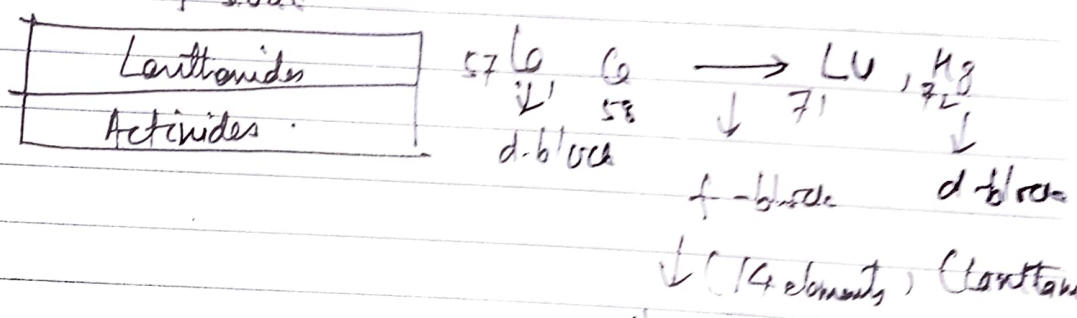
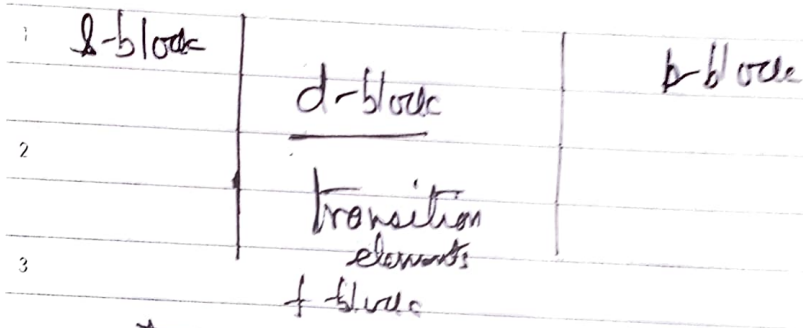


Last orbit \rightarrow Ultimate orbit

2nd from last \rightarrow penultimate orbit

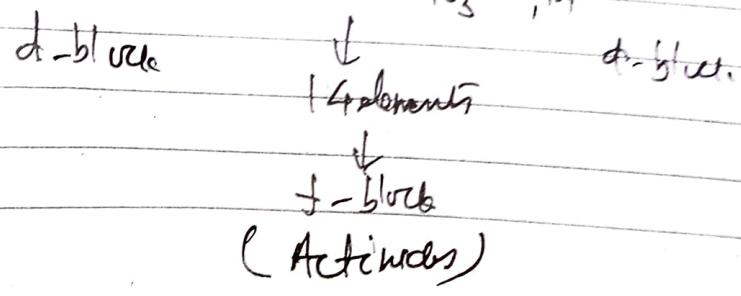
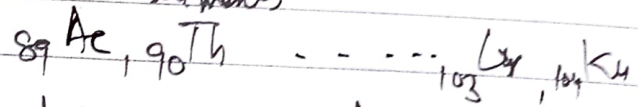
3rd from last \rightarrow Antepenultimate orbit

f-block elements are also called Inner transition elements.



They are in between

Transition elements



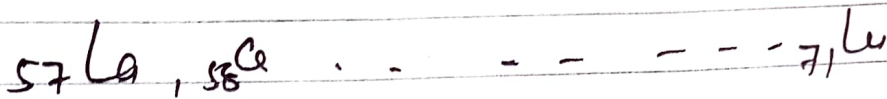
JANUARY							11
S	M	T	W	T	F	S	WK
30	31					1	1
2	3	4	5	6	7	8	2
9	10	11	12	13	14	15	3
16	17	18	19	20	21	22	4
23	24	25	26	27	28	29	5

(019-346) WK 4

There are two series of transition

elements.

(1) 4f-series:



4f1

4f¹⁴



Lanthanides

$$(n-2) = 4$$

$$n = 4 + 2 = 6$$

Lanthanides are 14 elements after La (Z=57). They are so called because they come after La and resemble in properties with La. They have been placed in P.T. along with La in gr 3 and Pd=6.

(2) 5f-series:



5f1

5f¹⁴



Actinides

Actinides are 14 elements after Ac.

They are so called because they come after Ac and resemble in properties with Ac. They have been placed in P.T. along with Ac in gr 3 (IIIB) and Pd=7.