

APPENDIX -2

Electronic Configuration of Elements

Element	Atomic Number	Electronic Configuration
H	1	1s ¹
He	2	1s ²
Li	3	[He] 2s ¹
Be	4	[He] 2s ²
B	5	[He] 2s ² 2p ¹
C	6	[He] 2s ² 2p ²
N	7	[He] 2s ² 2p ³
O	8	[He] 2s ² 2p ⁴
F	9	[He] 2s ² 2p ⁵
Ne	10	[He] 2s ² 2p ⁶
Na	11	[Ne] 3s ¹
Mg	12	[Ne] 3s ²
Al	13	[Ne] 3s ² 3p ¹
Si	14	[Ne] 3s ² 3p ²
P	15	[Ne] 3s ² 3p ³
S	16	[Ne] 3s ² 3p ⁴
Cl	17	[Ne] 3s ² 3p ⁵
Ar	18	[Ne] 3s ² 3p ⁶
K	19	[Ar] 4s ¹
Ca	20	[Ar] 4s ²
Sc	21	[Ar] 3d ¹ 4s ²
Ti	22	[Ar] 3d ² 4s ²
V	23	[Ar] 3d ³ 4s ²
*Cr	24	[Ar] 3d ⁵ 4s ¹
Mn	25	[Ar] 3d ⁵ 4s ²
Fe	26	[Ar] 3d ⁶ 4s ²

Element	Atomic Number	Electronic Configuration
Co	27	[Ar] 3d ⁷ 4s ²
Ni	28	[Ar] 3d ⁸ 4s ²
*Cu	29	[Ar] 3d ¹⁰ 4s ¹
Zn	30	[Ar] 3d ¹⁰ 4s ²
Ga	31	[Ar] 3d ¹⁰ 4s ² 4p ¹
Ge	32	[Ar] 3d ¹⁰ 4s ² 4p ²
As	33	[Ar] 3d ¹⁰ 4s ² 4p ³
Se	34	[Ar] 3d ¹⁰ 4s ² 4p ⁴
Br	35	[Ar] 3d ¹⁰ 4s ² 4p ⁵
Kr	36	[Ar] 3d ¹⁰ 4s ² 4p ⁶
Rb	37	[Kr] 5s ¹
Sr	38	[Kr] 5s ²
Y	39	[Kr] 4d ¹ 5s ²
Zr	40	[Kr] 4d ² 5s ²
Nb	41	[Kr] 4d ³ 5s ²
*Mo	42	[Kr] 4d ⁵ 5s ¹
Tc	43	[Kr] 4d ⁵ 5s ²
Ru	44	[Kr] 4d ⁶ 5s ²
Rh	45	[Kr] 4d ⁷ 5s ²
Pd	46	[Kr] 4d ⁸ 5s ²
*Ag	47	[Kr] 4d ¹⁰ 5s ¹
Cd	48	[Kr] 4d ¹⁰ 5s ²
In	49	[Kr] 4d ¹⁰ 5s ² 5p ¹
Sn	50	[Kr] 4d ¹⁰ 5s ² 5p ²
Sb	51	[Kr] 4d ¹⁰ 5s ² 5p ³
Te	52	[Kr] 4d ¹⁰ 5s ² 5p ⁴

Element	Atomic Number	Electronic Configuration
I	53	[Kr] 4d ¹⁰ 5s ² 5p ⁵
Xe	54	[Kr] 4d ¹⁰ 5s ² 5p ⁶
Cs	55	[Xe] 6s ¹
Ba	56	[Xe] 6s ²
*La	57	[Xe] 5d ¹ 6s ²
*Ce	58	[Xe] 4f ² 6s ²
Pr	59	[Xe] 4f ³ 6s ²
Nd	60	[Xe] 4f ⁴ 6s ²
Pm	61	[Xe] 4f ⁵ 6s ²
Sm	62	[Xe] 4f ⁶ 6s ²
Eu	63	[Xe] 4f ⁷ 6s ²
*Gd	64	[Xe] 4f ⁷ 5d ¹ 6s ²
Tb	65	[Xe] 4f ⁹ 6s ²
Dy	66	[Xe] 4f ¹⁰ 6s ²
Ho	67	[Xe] 4f ¹¹ 6s ²
Er	68	[Xe] 4f ¹² 6s ²
Tm	69	[Xe] 4f ¹³ 6s ²
Yb	70	[Xe] 4f ¹⁴ 6s ²
Lu	71	[Xe] 4f ¹⁴ 5d ¹ 6s ²
Hf	72	[Xe] 4f ¹⁴ 5d ² 6s ²
Ta	73	[Xe] 4f ¹⁴ 5d ³ 6s ²
*W	74	[Xe] 4f ¹⁴ 5d ⁵ 6s ¹
Re	75	[Xe] 4f ¹⁴ 5d ⁵ 6s ²
Os	76	[Xe] 4f ¹⁴ 5d ⁶ 6s ²
Ir	77	[Xe] 4f ¹⁴ 5d ⁷ 6s ²
*Pt	78	[Xe] 4f ¹⁴ 5d ⁹ 6s ¹
*Au	79	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ¹
Hg	80	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ²
Tl	81	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ¹

Element	Atomic Number	Electronic Configuration
Pb	82	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ²
Bi	83	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ³
Po	84	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁴
At	85	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁵
Rn	86	[Xe] 4f ¹⁴ 5d ¹⁰ 6s ² 6p ⁶
Fr	87	[Rn] 7s ¹
Ra	88	[Rn] 7s ²
Ac	89	[Rn] 6d ¹ 7s ²
Th	90	[Rn] 6d ² 7s ²
Pa	91	[Rn] 5f ² 6d ¹ 7s ²
U	92	[Rn] 5f ³ 6d ¹ 7s ²
Np	93	[Rn] 5f ⁴ 6d ¹ 7s ²
Pu	94	[Rn] 5f ⁶ 7s ²
Am	95	[Rn] 5f ⁷ 7s ²
Cm	96	[Rn] 5f ⁷ 6d ¹ 7s ²
Bk	97	[Rn] 5f ⁸ 6d ¹ 7s ²
Cf	98	[Rn] 5f ¹⁰ 7s ²
Es	99	[Rn] 5f ¹¹ 7s ²
Fm	100	[Rn] 5f ¹² 7s ²
Md	101	[Rn] 5f ¹³ 7s ²
No	102	[Rn] 5f ¹⁴ 7s ²
Lr	103	[Rn] 5f ¹⁴ 6d ¹ 7s ²
Rf	104	[Rn] 5f ¹⁴ 6d ² 7s ²
Db	105	[Rn] 5f ¹⁴ 6d ³ 7s ²
Sg	106	[Rn] 5f ¹⁴ 6d ⁴ 7s ²
Bh	107	[Rn] 5f ¹⁴ 6d ⁵ 7s ²
Hs	108	[Rn] 5f ¹⁴ 6d ⁶ 7s ²
Mt	109	[Rn] 5f ¹⁴ 6d ⁷ 7s ²

* Elements having exceptional electronic configuration