ADDITIONAL MULTIPLE CHOICE QUESTIONS

1. **Shielding effect is greater in atoms with greater number of:**
   (a) Protons (b) Neutrons (c) Electrons (d) Positrons
2. **There are total ____ groups and _____ periods in the modern periodic table:**
   (a) Seven, eight (b) Eighteen, seven (c) Eight, seventeen (d) Sixteen, eight
3. **If we move from left to right in a period, the value of ionization energy:**
   (a) Remains same (b) Decreases (c) Increases (d) Not effected
4. **The ionization energy of sodium is:**
   (a) +495.8 kj/mol (b) +594.8 kj/mol (c) -495.8 kj/mol (d) -594.8 kj/mol
5. **It is the amount of energy released when an electron is added up in the outermost shell of an isolated gaseous atom:**
   (a) Shielding effect (b) Electron affinity (c) Electro negativity (d) Ionization energy
6. **Salts of sodium give:**
   (a) Bluish green (b) Red (c) Yellow (d) Green
7. **The half of distance between the nuclei of the two bonded atoms is referred as:**
   (a) Atomic size (b) Atomic radius (c) Ionic radii (d) Both (a) and (b)
8. **Sixth and seventh periods are called:**
   (a) Short period (b) Normal period (c) Long period (d) Very long period
9. **The d-block elements lie between the blocks:**
   (a) s-p (b) d-f (c) p-s (d) f-d
10. **Which one of the halogens has the highest electro-negativity?**
    (a) Bromine (b) Iodine (c) Chlorine (d) Fluorine
11. **The shielding effect of the inner electrons is responsible for:**
    (a) Increasing ionization energy value (b) Decreasing ionization energy value
    (c) Increasing electron affinity (d) Increasing electronegativity
12. **According to the modern periodic law, the properties of the elements are periodic function of their:**
    (a) Atomic number (b) Number of electrons
    (c) Mass number (d) Number of valence electrons
13. **Which is the best reason for increasing ionization energy from left to right in a period?**
    (a) The shielding effect remains the same (b) The nuclear chare increases
    (c) The number of inner electrons increases (d) Increasing electronegativity
14. **Units of ionization energy are:**
    (a) Calones/mol (b) kj/mol (c) kj (d) j/mol
15. **5-f series of inner transition elements are called:**
    (a) Lanthanides (b) Actinides (c) Halogens (d) Alkali metals
16. **Halogens belong to group:**
    (a) 17 (b) 16 (c) 18 (d) 32
17. **How many elements are there in 4^{th} period of the periodic table?**
    (a) 7 (b) 8 (c) 18 (d) 32

18. Which one is the incomplete period in the periodic table?
(a) fourth period (b) second period (c) seventh period (d) first period

19. Which scientist had given the idea of octaves for the arrangement of elements?
(a) Mendeleev (b) Al-Razi (c) Newlands (d) Dobereiner

20. Atomic number of K = 19. Its valence shell configuration is:
(a) $4s^1$ (b) $3s^1$ (c) $6s^1$ (d) $5s^1$

21. Keeping in view the size of atom, which order is the correct one?
(a) Mg > Sr (b) Ba> Mg (c) Ca > Ba (d) Cl > I

22. In 5^{th} period the elements have range from:
(a) 19 to 36 (b) 37 to 54 (c) 11 to 18 (d) 55 to 86

23. Zero group or noble gases have general electronic configuration.
(a) ns^2, np^2 (b) ns^2, np^4 (c) ns^2, np^6 (d) ns^2, np^5

24. Which element exists in liquid form at room temperature?
(a) Ba (b) Br (c) Be (d) B

25. Number of elements placed in 6^{th} period is:
(a) 18 (b) 8 (c) 32 (d) 14

26. Point out the number of electrons in the valence shells of halogens:
(a) 6 (b) 5 (c) 7 (d) 8

27. Electronegativity of oxygen is:
(a) 2.5 (b) 3.0 (c) 3.4 (d) 4.0

28. Which one is the smallest among the following?
(a) Na (b) F (c) O (d) N

29. The radius of carbon atom is:
(a) 154 pm (b) 77 pm (c) 68 pm (d) 70 pm

30. Elements of group I and group II have valence electrons in:
(a) s-subshell (b) p-subshell (c) d-subshell (d) f-subshell

31. In 1860 correct atomic mass of elements were determined by:
(a) Cannizzaro (b) Newlands (c) Mosely (d) Mendeleev

32. How many elements were arranged by Mendeleev in order of increasing atomic masses?
(a) 60 (b) 61 (c) 62 (d) 63

33. How many periods are there in the modern periodic table?
(a) 6 (b) 7 (c) 8 (d) 9

34. 32 elements are present in which period of periodic table?
(a) 5^{th} (b) 6^{th} (c) 4^{th} (d) 8^{th}

35. Mark the incorrect statement.
(a) 1^{st} period contains two elements (b) 2^{nd} period contains eight elements
(c) 3^{rd} period contains 18 elements (d) 7^{th} period contains 23 elements only

36. In which atom outermost electrons are highly shielded?
(a) F (b) Cl (c) Br (d) I

37. Which of the following does not belong to 1^{st} group?
(a) Hydrogen (b) Sodium (c) Rubidium (d) Calcium

38. Which one of the following halogen has highest electronegativity?

(a) F (b) I (c) Cr (d) CI

39. Point out among the following which has highest value of electron affinity

(a) F (b) CI (c) Br (d) I

40. Lanthanide series start after:

(a) La (b) Ba (c) Ra (d) Cs

41. ns^2 is the general electronic configuration of:

(a) Boron family (b) Nitrogen family

(c) Alkali metals (d) Alkaline earth metals

42. For Boron Z = 5, it belongs to which block:

(a) s (b) p (c) d (d) f

ANSWER KEY

1	c	12	a	23	c	34	b
2	b	13	b	24	b	35	d
3	c	14	b	25	c	36	d
4	a	15	b	26	c	37	d
5	b	16	a	27	c	38	a
6	c	17	c	28	b	39	a
7	d	18	c	29	b	40	a
8	d	19	c	30	a	41	d
9	a	20	a	31	a	42	b
10	d	21	b	32	d		
11	b	22	b	33	b		