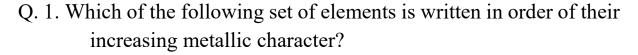
## **Chapter-5**

## Worksheet-2



- (a) Be, Mg, Ca
- (b) Na, Li, K
- (c) Mg, Al, Si
- (d) C, O, N
- Q.2. Up to which element was the Law of Octaves found to be applicable?
- (a) Oxygen
- (b) Calcium
- (c) Cobalt
- (d) Potassium
- Q.3. Which of the following is the outermost shell for elements of period 2?
- (a) K shell
- (b) L shell
- (c) M shell
- (d) N shell

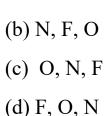
| Q.4. In Mendeleev's Periodic Table, gaps were left for the elements to be discovered later. Which of the following elements found place in the Periodic Table later? |
|--|
| (a) Germanium  |
| (b) Chlorine   |
| (c) Oxygen   |
| (d) Silicon  |
|  |
| Q.5. If the two members of a Dóbereiner triad are calcium and strontium, the third member of the triad is  |
| (a) Magnesium  |
| (b) Barium   |
| (c) Cesium   |
| (d) Sodium   |
|  |
| Q. 6. The Modern Periodic Table contains   |
| (a) 18 periods and 7 groups.   |
| (b) 7 periods and 18 groups.   |
| (c) 7 periods and 7 groups.  |

Q. 7. Which of the following gives the correct increasing order of the

(d) 18 periods and 18 groups

(a) O, E, N

atomic radii of O, F and N?



Q.8. The electronic configuration of an element is 2, 8, 8, 2. This element belongs to

- (a) 1st group.
- (b) 2nd group.
- (c) 3rd group.
- (d) 4th group.

Q.9. Arrange the following elements in the order of their decreasing metallic character Na, Si, CI, Mg, Al

(a) 
$$Cl > Si > Al > Mg > Na$$

(d) 
$$Al > Na > Si > Cl > Mg$$

Q.10. Three elements B, Si and Ge are

- (a) Metals.
- (b) Non-metals.
- (c) uncalloids
- (d) Metal, non-metal and metalloid respectively.

- Q. 11. (a) What does each group in the Periodic Table signify?
- (b) Why do elements in any given group have similar properties?
- Q. 12. Why do group 1 elements form unipositive ions?
- Q.13. Which is smaller?
- (a)  $Na^+$  or Na
- (b) Cl or  $Cl^-$
- Q.14. Give reasons:
- (a) The elements of group 18 are called zero valent.
- (b) Group 17 elements form uninegative anions.
- Q.15. Would you place the two isotopes of chlorine, Cl-35 and Cl-37 in different slots because of y their different atomic masses or in the same because their chemical propert.es are the same?

  Justify your answer.
- Q.16. How does the metallic character change along the period?
- Q.17. What is atomic radius? Why does atomic radius decrease across a period?
- Q. 18. Why does the size of the atom increase down the group?

- Q.19. Can the following groups of elements be classified as Dbbereiner's triad?
- (a) Na, Si, Cl
- (b) Be, Mg, Ca

[Atomic mass of Be (9); Na (23); Mg (24); Si (28); Cl (35); Ca (40)] Explain by giving reason.

Q.20. The atomic number of an element is 17. To which group and period does this element belong?

Determine its valency.