1. The electronic configuration of an atom is 1S2 2S2 2P3. The number of unpaired electrons in this atom is
2. 1 b. 0 c. 3 d. 5
3. Which of the following elements has lowest ionization energy ?
4. Li b. B c. Be d. F
5. Electronegativity is the measure of capacity of an atom to
6. Repel electrons b. attract electrons

c. combines with protons d. share electrons with other atoms

4. The substance which possesses zero resistance at 0 K is

a. conductor b. super conductor c. insulator d. semiconductor

5. Lanthanides are characterized by filling of the subshell.

a. 4f b. 5f c. 3d d. 2p

6. The oxidation state shown by actinides other than +4 state is

a. +6 b. +3 c. +2 d. +1

7. Plutonium is a/an

a. Lanthanides b. Actinides c. Transition metal d. none of these

8. Which of the following is NOT correct ?

a. Atomic radius of Ca is larger than that of Br.

b. Atomic radius of Ca is smaller than that of Sr.

c. Atomic radius of Ca is larger than that of Tl.

d. Atomic radius of Ca is larger than that of K.

9. Pick out the molecule which has non-zero dipole moment

a. Cl2 **b. CCl4** c. CO2 d. CHCl3

10. Which of the following elements will have the highest electronegativity?

1. Chlorine b. Nitrogen c. Cesium **d. Fluorine**

11. Which one of the following is true about metallic character when we move from left to right in a period and top to bottom in a group in the periodic table?

**a. Decrease in a period and increase along the group**

b. Increase in a period and decrease in a group

c. Increase both in a period and in a group

d. Decrease both in a period and in a group

12. One of the following substance is neither good conductor of electricity nor an insulator. The substance is

a. Chromium b. Gallium **c. Germanium** d. Potassium

13. Which among the following elements is a metalloid?

a. Rubidium b. Titanium **c. Arsenic** d. Cadmium

14. The atomic radius of Hydrogen atom is

a.37 nanometer b. 37 picometer c. 17 picometer **d. 57 picometer**

15. Which among the following first increases than decreases in a Period of a periodic table?

[A] metallic property [B] Chemical Reactiveness

**[C] Valency**  [D] Electron affinity

16. Which among the following were not discovered by the time , Mendeleev published his periodic table?

[A] Lanthanides [B] Actinides

**[C] Noble Gases** [D] Halogens

17. f-block elements in the periodic table which are commonly called Lanthanides have the following atomic numbers:

[A] 57-70 **[B] 58-71**

[C] 59-72 [D] 58-70

18. The atomic number of the element unnilnilium is

a. 101 b. 102 c. 105 **d. 100**

19. What would be the IUPAC name for an element with atomic number 222?

a) bibibiium b) bididium c) didibium **d) bibibium**

20. Select the correct sequence of first ionization energy :

a) Be < B < N < O b) Be < B < O < N

**c) B < Be < O < N** d) B < Be < N < O

21. In the third period the first ionization potential is of the order.

a) Na > Al > Mg > Si > P b) Na < Al < Mg < Si < P

c) Mg > Na > Si > P > Al **d) Na< Al < Mg < P < Si**

22. \_\_\_\_\_ group contains the member of halogen family.

**a) 17th** b) 15th c) 18th d) 16th

23. Neon shows zero electron affinity due to \_\_\_\_\_.

a) stable arrangement of neutrons **b) stable configuration of electrons**

c) reduced size d) increased density

24. Potassium belongs to \_\_\_\_\_\_\_\_ period.

a) first b) second c) third **d) fourth**

25. Which among the following are periodic properties?

a) Ionization energy b) atomic radius

c) electronegativity **d) all the above**

26. Metals are \_\_\_\_\_\_\_

**a) Electro positive** b) Electronegative

c) Both a&b d) neither a nor b

27. Match the following

1. Alkali metal - a) 15

2. Transition metal - b) 16

3. Nitrogen - c) 1

4. Chalcogen - d) 3-12

**a) 1-c; 2-d; 3-a; 4-b** b) 1-c; 2-d; 3-b; 4-a

c) 1-d; 2-a; 3-c; 4-b d) 1-a; 2-b; 3-c; 4-d

28. The electronic configuration of the elements A and B are 1s2 , 2s2 , 2p6 , 3s2 and 1s2 , 2s2 , 2p5 respectively. The formula of the ionic compound that can be formed between these elements is

a) AB **b) AB2** c) A2B d) none of the above

29. Which of the following pairs of elements exhibit diagonal relationship?

a) Be and Mg b) Li and B c) Be and B **d) Be and Al**

30. Which among the following is not correctly matched?

[A] Sodium : Natrium

[B] Potassium : Kalium

[C] Mercury : Hydrargyrum

**[D] Arsenic : Stibium**