**Reg. NO:**

**TIME:**

**DATE: 19.4.20**

**CLASIFICATION OF ELEMENTS -PRACTICE SHEET-02 TOTAL MARKS: 180**

**SUBJECT: CHEMISTRY**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | **Born cycle is used to determine:** | | | | | | | |
|  | a) | Lattice energy | b) | Electron affinity | c) | Ionization energy | d) | Either of them |
| 2. | **The electronic configurations of four elements and are given below,**  **The formula of the ionic compounds that can be formed between these elements are:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 3. | **The element with strong electropositive nature is:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 4. | **Octet rule is not valid for the molecule:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 5. | **The correct order of reactivity of halogens is** | | | | | | | |
|  | a) | F > Br >Cl> I | b) | F >Cl> Br > I | c) | I > Br >Cl> F | d) | Cl> I > Br > F |
| 6. | **has higher boiling point than expected, because:** | | | | | | | |
|  | a) | With water it forms | | | | | | |
|  | b) | It has strong intermolecular hydrogen bonds | | | | | | |
|  | c) | It has strong intermolecular covalent bonds | | | | | | |
|  | d) | Its density decreases in freezing | | | | | | |
| 7. | **The screening effect of -electrons is:** | | | | | | | |
|  | a) | Equal to the -electrons | | | | | | |
|  | b) | Much more than -elecrons | | | | | | |
|  | c) | Same as -electrons | | | | | | |
|  | d) | Less than -electrons | | | | | | |
| 8. | **Which has the largest first energy?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 9. | **In which of the following molecules are all the bonds not equal?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 10. | **The bond between two identical non-metal atoms has a pair of electrons:** | | | | | | | |
|  | a) | Unequally shared between the two | | | | | | |
|  | b) | Equally shared between the two | | | | | | |
|  | c) | Transferred fully from one atom to another | | | | | | |
|  | d) | None of the above | | | | | | |
| 11. | **The number of unpaired electrons in a paramagnetic diatomic molecule of an element with atomic number 16 is:** | | | | | | | |
|  | a) | 4 | b) | 1 | c) | 2 | d) | 3 |
| 12. | **In ion, number of bond pair and lone pair electrons are respectively:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 13. | **Which element of second period forms most acidic oxide?** | | | | | | | |
|  | a) | Carbon | b) | Nitrogen | c) | Boron | d) | Fluorine |
| 14. | **The electronic configuration of four elements are given below. Which element does not belong to the same family?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 15. | **For the four successive transition elements the stability of oxidation state will be there in which of the following order?**  (At. no. ) | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 16. | **Which is correct in the following?** | | | | | | | |
|  | a) | Radius of atom is while that of ion is | | | | | | |
|  | b) | Radius of atom is while that of atom is | | | | | | |
|  | c) | The radius of atom is while that of ion is | | | | | | |
|  | d) | Radius of atom is while that of ion is | | | | | | |
| 17. | **The linear structure is possessed by:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 18. | **Which of the following has largest ionic radius?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 19. | **In the cyanide ion, the formal negative charge is on:** | | | | | | | |
|  | a) |  | | | | | | |
|  | b) |  | | | | | | |
|  | c) | Both and | | | | | | |
|  | d) | Resonate between and | | | | | | |
| 20. | **The size of ionic species is correctly given in the order:** | | | | | | | |
|  | a) |  | | | | | | |
|  | b) |  | | | | | | |
|  | c) |  | | | | | | |
|  | d) |  | | | | | | |
| 21. | **Which statement is wrong?** | | | | | | | |
|  | a) | 2nd energy shows jump in alkali metals | | | | | | |
|  | b) | 2nd electron affinity for halogens is zero | | | | | | |
|  | c) | Maximum electron affinity exists for | | | | | | |
|  | d) | Maximum ionization energy exists for | | | | | | |
| 22. | **Which of the following atoms has minimum covalent radius?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 23. | **The second electron affinity is zero for** | | | | | | | |
|  | a) | Alkali metals | b) | Halogens | c) | Noble gases | d) | Transition metal |
| 24. | **For alkali metals, which one of the following trends is incorrect?** | | | | | | | |
|  | a) | Hydration energy : Li > Na > K >Rb | | | b) | Ionisation energy : Li > Na > K >Rb | | |
|  | c) | Density : Li < Na < K <Rb | | | d) | Atomic size : Li < Na < K <Rb | | |
| 25. | **have heat of formation equal to and**  **respectively. The most stable oxide is** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 26. | **If Aufbau rule is not followed, K-19 will be placed in** | | | | | | | |
|  | a) | -block | b) | -block | c) | -block | d) | -block |
| 27. | **The electronegativity order of and is:** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 28. | **Which has the minimum bond energy?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| 29. | **The bond angle in (for ) is:** | | | | | | | |
|  | a) | Same as that of in | | | | | | |
|  | b) | Greater than bond angle in | | | | | | |
|  | c) | Greater than and less than | | | | | | |
|  | d) | Same as in | | | | | | |
| 30. | **In which of the following arrangements, the sequence is not strictly according to the property written against it?** | | | | | | | |
|  | a) | : increasing oxidising power | | | | | | |
|  | b) | : increasing acid strength | | | | | | |
|  | c) | : increasing basic strength | | | | | | |
|  | d) | : increasing first ionisation enthalpy | | | | | | |
|  |  | | | | | | | |