

A. Define the following terms

1. Oxidation state
2. Cation
3. Anion
4. Ionic Bond
5. Electronegativity

B. Identify the oxidative state of the following atoms/ions in their stable state (write the symbol and charge for each)

- | | | | | |
|----------------|------------|------------|--------------|---------------|
| 6. Magnesium | 7. Gallium | 8. Sulfur | 9. Bromine | 10. Argon |
| 11. Iron (III) | 12. Cupric | 13. Aurous | 14. Nitrogen | 15. Potassium |

Write the correct formula and name the compounds for the following sets of atoms/ions

- | | | |
|-----------------------------|----------------------------|---------------------------|
| 16. Lithium and Bromine | 17. Sodium and Oxygen | 18. Chlorine and Calcium |
| 19. Iron (III) and Fluorine | 20. Cuprous and hydroxide | 21. Sulfate and Magnesium |
| 22. Strontium and Nitrite | 23. Zinc and Perchlorate | 24. Iodine and Lead (IV) |
| 25. Ammonium and Oxygen | 26. Aluminum and Sulfur | 27. Barium and Carbonate |
| 28. Nitrate and Ammonium | 29. Cobalt(III) and Iodine | 30. Sulfite and Gallium |