AP HW Quiz Quantum Theory Electron notations

Give the indicated notations for the following.

1. Orbital notation phosphorus.
2. Electron configuration of potassium
3. Orbital notation of Al^{+3}
4. Core electron configuration of iridium (Ir)
5. Core orbital notation of gallium (Ga)
6. Electron configuration oxide (O^{-2})
7. Core electron configuration of barium (Ba)
8. Core orbital notation of molybdenum (Mo)
9. Electron configuration of V^{+2}
10. Core electron configuration tin (Sn)
11. Core electron configuration of platinum (Pt)
12. Electron configuration of Mg^{+2}
13. Core orbital notation of radium (Ra)
14. Orbital notation of carbon (C)
15. Lewis electron dot notation of:
    a. nitrogen (N) b. sulfide (S^{-2}) c. indium (In) d. calcium ion (Ca^{+2}) d. lithium (Li)

Other questions

16. What is the shape of p orbitals?
17. Which is the highest energy level contain f orbitals
18. How many p orbitals can exist in any energy level
19. Identify the following elements
    a. $1s^2 2s^2 2p^6 3s^2 3p^4$
    b. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^2$
    c. $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^1 4d^{10}$
20. How many electron pairs do the following elements contain?
    a. Ti (titanium) b. oxygen (O) c. Rb (rubidium) d. Cl^{-1} (chloride)

+ AP Question