Assignment 1

The data for submitting this assignment has passed. As per our records you have not submitted this assignment.

Assignment 1

1. Environmental pollution originates from:
   - Industrial waste
   - Agricultural runoff
   - Natural phenomena
   - All of these
   No. the answer is incorrect.
   Accepted Answers: All of these

2. Localized pollution is released by:
   - Emissions in water bodies
   - Atmospheric emissions
   - Landfills and waste dumps
   - All of these
   No. the answer is incorrect.
   Accepted Answers: All of these

3. Particles possess:
   - Mass and positive charge
   - Mass and negative charge
   - No mass and no charge
   - Mass and no charge
   No. the answer is incorrect.
   Accepted Answers: Mass and negative charge

4. In Bohr theory of atomic structure the electrons are revolving:
   - Stationary orbits
   - Recirculating orbits
   - Elliptical orbits
   - Unstable and changing electron density in orbitals
   No. the answer is incorrect.
   Accepted Answers: Stationary orbits

5. In an atom the shape of orbitals are:
   - Like a sphere
   - Like a dumbbell
   - Proposed in between x, y, z axes
   - Proposed towards the corner of an hexagon
   No. the answer is incorrect.
   Accepted Answers: Proposed towards the corner of an hexagon

6. Polyatomic compounds show multiple spectra because they absorb X-ray radiation through:
   - Electronic and vibrational transitions
   - Electronic and rotational transitions
   - Vibrational and rotational transitions
   - Electronic, vibrational and rotational energy levels
   No. the answer is incorrect.
   Accepted Answers: Electronic, vibrational and rotational energy levels

7. Hydrogen atom and several sets of various frequencies radiations. They can be grouped in to how many of the following series?
   - Lyman, Balmer only
   - Lyman, Balmer, Paschen only
   - Lyman, Balmer, Paschen, Brackett only
   - Lyman, Balmer, Paschen, Brackett, Pfund
   No. the answer is incorrect.
   Accepted Answers: Lyman, Balmer, Paschen, Brackett, Pfund

8. Arrange the following in the correct sequence of energy transitions:
   - Excited state \to\text{ionization} \to\text{electron} \to\text{ionization} \to\text{ionization}
   - Transition of excited \text{electron} \to\text{ionization} \to\text{excited}\text{state}
   - Transitions of excited \text{state} \to\text{ionization} \to\text{ionization}
   - Cutoff energy \to\text{ionization} \to\text{ionization}
   No. the answer is incorrect.
   Accepted Answers: Transition of excited \text{electron} \to\text{ionization} \to\text{ionization}

9. Isotope of radium with even number of neutrons are:
   - More common to nucleate containing odd number of neutrons
   - Less common to nucleate containing odd number of neutrons
   - Isotope of radium containing odd number of neutrons
   - All of the above
   No. the answer is incorrect.
   Accepted Answers: More common to nucleate containing odd number of neutrons

10. The quantum number \( n \) defines:
    - Principal electron shell
    - Number ofelectrons and orientation within a subshell
    - Number oforbitals and orientation within a subshell
    - Number ofelectrons
    No. the answer is incorrect.
    Accepted Answers: Number oforbitals and orientation within a subshell