Class-11 Diwali Home Work 2017 NCERT (Chemistry)

Date-15/10/2017 **Submission date-24/10/2017**

Chapter-3 (Classification of elements and periodicity in properties)

1. Write down the trends of ionization energy in respective groups and periods?
2. Explain in brief first and Second ionization enthalpy of s-block elements?
3. Explain acidic and basic properties of certain oxides in periodic table?
4. Explain effective nuclear charge?

Chapter-4(Chemical Bonding)

1. Explain VSEPR theory with suitable example?
2. Explain molecular orbital diagram of sp,sp^2,sp^3 by taking any example of them?
3. Explain hybridization of PCl_5, O_3, NO_2^-, $NO_2^{\oplus}$?
4. Why H_2O is liquid whereas H_2S is gas at room temperature?

Chapter-6(Thermodynamics)

1. Explain why internal energy 'U' of a system changes?
2. Explain various application of thermodynamics.
3. Explain enthalpies for different types of reactions.
4. Explain entropy & spontaneity with an example.
5. Solve question no. -6.19

Class-11 Diwali Home Work 2017 NCERT (Physics)

Chapter-6 (Work , Power and Energy)

1. What is work energy theorem? Define various conditions of work under the influence of force.
2. Explain work done by variable force with graph and work-energy theorem for variable forces.
3. What is conservation of mechanical energy? Explain this phenomenon for spring by writing derivation.
4. How many types of collision are there? Explain one dimension and two dimension collision.
5. Solve question 6.26 and 6.28

Chapter-7 (System of particles and rotational motion)

1. What is centre of mass? Derive expression for its coordinates. Explain motion of centre of mass.
2. What is momentum? Describe its various types. Describe relation between angular and linear velocity.
3. Find expression for torque and angular momentum for a system of particles.
4. Define kinematics, dynamics and angular momentum for rotation about a fixed axes.
5. Find kinetic energy for rolling motion.
6. Solve question – 7.24 and 7.31

Chapter-9 (Mechanical Properties of solid)

1. What is the difference between stress and strain? Draw a relation between them.
2. Define and derive expression for:-

(a) Young's modulus of material of a wire

(b) Shear modulus and Bulk Modulus

3. Solve question no. – 9.18, 9.20 and 9.21

Class-11 Diwali Home Work 2017 Pathfinder Notebook (Mathematics)

All Question of these chapter's

Quadratic Equation

Complex Number

Sequence and Series

Straight Lines