

INTERNATIONAL INDIAN PUBLIC SCHOOL – RIYADH

Subject: Physics

Grade: XI

I Semester Plan [April to June 2015]

S.No	Week	Chapter	Class Work	Home Work
1.	8/4 – 9/4	1. Physical world. 2. Units and measurement.	Measurement of length, mass, time, Error analysis.	Learn the topic & do the numerical.
		9. Mechanical properties of solids.	Stress, strain and Hooke's law	Learn the topic & do the numerical.
2.	12/4 – 16/4	2. Units and measurement	Dimensional formulae, Dimensional equation.	Learn the topic & do the numerical.
		9. Mechanical properties of solids.	Stress-strain curve, Elastic modulus.	Do the conceptual questions.
3.	19/4 – 23/4	2. Units and measurement	Dimensional analysis and its applications.	Learn the topic & do the numerical.
		10. Mechanical properties of fluids.	Pressure, Streamline flow.	Learn the topic & do the numerical.
4.	26/4 – 30/4	3. Motion in a straight line	Displacement, velocity, acceleration.	Learn the topic & do the numerical.
		10. Mechanical properties of fluids.	Bernoulli's principle, Viscosity.	Do the conceptual questions.
5.	3/5 – 7/5	3. Motion in a straight line	Kinematic equations, Relative velocity.	Learn the topic & do the numerical.
		10. Mechanical properties of fluids.	Reynolds number, Surface tension.	Learn the topic & do the numerical.
6.	10/5 – 14/5	4. Motion in a plane	Vectors and scalars, Resolution of vectors.	Do the conceptual questions.
		11. Thermal properties of matter	Ideal-gas equation, Specific heat capacity.	Learn the topic & do the numerical.
7.	17/5 – 21/5	4. Motion in a plane	Vector addition – analytical method, Relative velocity.	Do the conceptual questions.
		11. Thermal properties of matter	Heat transfer, Newton's law of cooling	Learn the topic & do the numerical.
8.	31/5 – 4/6	4. Motion in a plane	Projectile motion, Uniform circular motion.	Do the conceptual questions.
		12. Thermodynamics Zeroth law, first law,	Thermodynamic processes.	Learn the topic & do the numerical.
9.	7/6 – 11/6	5. Laws of motion	Newton's laws of motion.	Learn the topic & do the numerical.
		12. Thermodynamics	Second law, Refrigerator, Heat pump.	Do the conceptual questions.
10.	14/6-25/6	EXAMINATION		

II Semester Plan [Sep 2015 to February 2016]

S. No	Week	Chapter	Class Work	Home Work
1.	30/8 – 3/9	5. Laws of motion	Conservation of momentum, Circular motion.	Learn the topic & do the numerical.
		13. Kinetic theory	Behaviour of gases.	Learn the topic & do the numerical.
2.	6/9 – 10/9	6. Work, Energy and Power	Work- energy theorem, Kinetic energy.	Do the conceptual questions.
		13. Kinetic theory	Law of equipartition of energy	Learn the topic & do the numerical.

3.	13/9 – 17/9	6. Work, Energy and Power	Potential energy of a spring, Law of conservation of energy	Learn the topic & do the numerical.
		13. Kinetic theory	Mean free path.	Do the conceptual questions.
4.	20/9 – 01/10	<i>Hajj Holidays</i>		
5.	04/10 – 08/10	6. Work, Energy and Power	Power, Collisions.	Learn the topic & do the numerical.
		14. Oscillations	Simple harmonic motion	Learn the topic & do the numerical.
6.	11/10 – 15/10	7. System of particles and Rotational motion.	Centre of mass, Linear momentum.	Learn the topic & do the numerical.
		14. Oscillations	Velocity and acceleration of SHM	Do the conceptual questions.
7.	18/10 – 22/10	7. System of particles and Rotational motion.	Angular velocity, Torque, Angular momentum	Learn the topic & do the numerical.
		14. Oscillations	Force and energy of SHM	Learn the topic & do the numerical.
8.	25/10 -29/10	7. System of particles and Rotational motion.	Equilibrium of a rigid body, Moment of inertia.	Do the conceptual questions.
		14. Oscillations	Damped SHM, Resonance.	Learn the topic & do the numerical.
9.	1/11 – 5/11	7. System of particles and Rotational motion.	Centre of mass, Linear momentum.	Learn the topic & do the numerical.
		14. Oscillations	Velocity and acceleration of SHM	Do the conceptual questions.
10.	8/11 – 12/11	7. System of particles and Rotational motion.	Theorems of perpendicular and parallel axes.	Learn the topic & do the numerical.
		15. Waves	Transverse and longitudinal waves	Learn the topic & do the numerical.
11.	15/11 – 19/11	8. Gravitation.	Kepler's laws, Universal law of gravitation.	Learn the topic & do the numerical.
		15. Waves	Speed of wave, Principle of superposition.	Do the conceptual questions.
12.	22/11 – 26/11	8. Gravitation.	Acceleration due to gravity, Gravitational potential energy.	Learn the topic & do the numerical.
		15. Waves	Beats.	Learn the topic & do the numerical.
13.	29/11 – 3/12	8. Gravitation.	Escape speed, Orbital velocity.	Do the conceptual questions.
		15. Waves	Doppler effect.	Learn the topic & do the numerical.
14.	6/12 – 10/12	8. Gravitation.	Energy of an orbiting satellite, Geostationary satellites.	Learn the topic & do the numerical.
		15. Waves	Reflection of waves.	Do the conceptual questions.
15.	13/12 – 17/12	Revision	Revision	Revising the chapters
16.	20/12 – 24/12	Revision	Revision	Revising the chapters
17.	27/12 – 07/01	<i>Winter Holidays</i>		
18.	10/01 – 14/01	Revision	Revision	Revising the chapters
19.	17/01 – 21/01	Revision	Revision	Revising the chapters

Teacher's Name

Teacher's Sign