



Pakistan Urdu School- Kingdom of Bahrain
Curriculum Implementation Plan for PHYSICS Grade X1

No.	Month/Week	Starting Date	Topics from Textbook or Others (Specify Unit Titles and Numbers)	National Curriculum References (Competency, Standards, Themes)	Total Periods
1.	4 th WEEK OF APRIL 1 st , 2 nd WEEKS OF MAY		MEASUREMENTS		
		23-04-2018	1.1 Physical Quantities 1.2 System International 1.3 Scientific Notation 1.4 Errors and uncertainties 1.5 Rounding off numbers 1.6 Precision and accuracy 1.7 Indicating uncertainty 1.8 Calculating uncertainty in the final result 1.8 Dimensions	Standard 1. Students will be able to display a sense of curiosity and wonder about the natural world and demonstrate an increasing awareness that this has led to new developments in science and technology.	15
			1ST MID TERM TEST	(From 13-05-18 till 17-05-18)	
2.			VECTORS AND EQUILIBRIUM		

	<p>13-05-2018</p> <p>3rd, 4th WEEKS OF MAY 1st, 2nd WEEKS OF JUNE</p>	<p>2.1 Vectors</p> <p>2.2 Cartesian coordinate system</p> <p>2.3 Addition of vectors</p> <p>2.4 Multiplication of vector</p> <p>2.5 Resolution of vector</p> <p>2.6 Addition of vectors by rectangular components</p> <p>2.7 Product of vectors</p> <p>2.8 Torque</p> <p>2.9 Equilibrium</p> <p>2.10 Concurrent Forces</p> <p>2.11 Conditions of Equilibrium</p>	<p>Standard 2. Students will be able to demonstrate an understanding of the impact of science and technology on society and use science and technology to identify problems and creatively address them in their personal, social and professional lives.</p>	<p>15</p>
3.		<p>MOTION AND FORCE</p>		

	<p style="text-align: center;">4th WEEK OF AUGUST 1st, 2nd and 3rd WEEKS OF SEPTEMB -ER</p>	<p>28-08-2018</p>	<p>3.1 Vector nature of Displacement</p> <p>3.2 Velocity</p> <p>3.3 Acceleration</p> <p>3.4 Graphical analysis of motion</p> <p>3.5 Equations of uniformly accelerated motion</p> <p>3.6 Newton's laws of motion</p> <p>3.7 Linear Momentum</p> <p>3.8 Elastic and Inelastic collision</p> <p>3.9 Momentum and explosive forces</p> <p>3.10 Projectile motion</p>	<p>Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and matter, their transformations and applications in physical systems.</p>	<p>17</p>
<p>4.</p>			<p>WORK, POWER & ENERGY</p>		

	<p style="text-align: center;">4th WEEK of SEPTEMBER -ER 1st & 2nd WEEKS OF OCTOBER</p>	<p>23-09-2018</p>	<p>4.1 Work</p> <p>4.2 Work done in gravitational field</p> <p>4.3 Power</p> <p>4.4 Energy</p> <p>4.5 Implication of energy losses in practical devices and efficiency</p> <p>4.6 Ideal Machine</p> <p>4.7 Absolute potential energy</p> <p>4.8 Escape velocity</p> <p>4.9 Inter conversion of potential energy and kinetic energy</p> <p>4.10 Conservation of Energy</p> <p>4.11 Sources of energy</p>	<p>Standard 2. Students will be able to demonstrate an understanding of the impact of science and technology on society and use science and technology to identify problems and creatively address them in their personal, social and professional lives.</p>	<p>15</p>
<p>5.</p>		<p>21-10-2018</p>	<p style="text-align: center;">CIRCULAR MOTION</p> <p>5.1 Angular Motion</p> <p>5.2 Relation between angular and linear displacement</p> <p>5.3 Centripetal force and centripetal acceleration</p>		

	<p style="text-align: center;">3rd and 4th WEEKS OF OCTOBER & 1st WEEK OF NOVEMBER</p>		<p>5.4 Torque and Moment of inertia</p> <p>5.5 Angular Momentum and Torque</p> <p>5.6 Kinetic energy of rotation</p> <p>5.7 Rolling of Disc and Hoop down the inclined plane</p> <p>5.8 The Artificial Satellites</p> <p>5.9 The Orbital velocity</p> <p>5.10 The Geo-Stationary Orbits</p> <p>5.11 The Real and apparent weight</p> <p>5.12 Weightlessness in Satellites and Gravity Free System</p> <p>5.13 The Artificial Gravity</p>	<p>Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and matter, their transformations and applications in physical systems.</p>	<p>15</p>
<p>6.</p>			<p>FLUID DYNAMICS</p>		

	2nd & 3rd WEEK OF NOVEMBER	11-11-2018	6.1 Viscous drag and Stokes law 6.2 Terminal velocity 6.3 Fluid flow 6.4 Equation of continuity 6.5 Bernoulli's equation	Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and matter, their transformations and applications in physical systems.	10
7.	1st & 2nd WEEKS OF JANUARY		OSCILLATION		
		02-01-2018	7.1 Oscillations 7.2 Terminology of Oscillatory motion 7.3 Simple harmonic motion 7.4 Circular motion and S.H.M. 7.5 Simple pendulum 7.6 Free and force oscillations 7.7 Resonance 7.8 Waveform of simple harmonic motion	Standard 2. Students will be able to demonstrate an understanding of the impact of science and technology on society and use science and technology to identify problems and creatively address them in their personal, social and professional lives.	10

			7.9 Phase 7.10 Damped oscillations 7.11 Sharpness of resonance		
WAVES					
8.	3rd & 4th WEEKS OF JANUARY				
		15-01-2019	8.1 Periodic Waves 8.2 Progressive waves 8.3 Classification of Progressive waves 8.4 Speed of sound 8.5 Effects of various factors on speed of sound in air 8.6 Superposition of waves 8.7 Interference of waves 8.8 Interference of sound waves 8.9 Beats 8.10 Reflection of waves and phase change	Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and matter, their transformations and applications in physical systems.	10

			8.11 Stationary Waves 8.12 Transverse stationary waves in a stretched string 8.13 Fundamental and overtone vibration 8.14 Resonance of Air column and Organ pipes 8.15 Doppler Effect 8.16 Ultrasonic Waves		
9.	1st, 2nd WEEKS OF FEBRUAR -Y		PHYSICAL OPTICS		
		03-02-2019	9.1 Nature of Light 9.2 Wave front 9.3 Huygens's principal 9.4 Coherent Sources 9.5 Interference of light 9.6 Young's double slits experiment	Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and	10

			<p>9.7 Interference in thin film</p> <p>9.8 Michelson's interferometer</p> <p>9.9 Diffraction of light</p> <p>9.10 Fraunhofer Diffraction at a single slit</p> <p>9.11 Diffraction Grating</p> <p>9.12 The Diffraction of X-rays by Crystal</p> <p>9.13 Polarization of Light</p>	<p>matter, their transformations and applications in physical systems.</p>	
10.	<p>3rd, 4th WEEKS OF FEBRUAR -Y</p>		<p>THERMODYNAMICS</p>		
		<p>17-02-2019</p>	<p>10.1 Thermal Equilibrium</p> <p>10.2 Heat and Work</p> <p>10.3 Equivalence of Heat and Work</p> <p>10.4 Internal Energy</p>	<p>Standard 4. Students will be able to describe and explain common properties, forms and interactions of energy and matter, their transformations</p>	<p>10</p>

			10.5 Thermodynamic system 10.6 First law of thermodynamics 10.7 Molar specific heat of a gas 10.8 Reversible and Irreversible processes 10.9 Heat Engine 10.10 Second law of thermodynamics 10.11 Carnot cycle 10.12 Entropy	and applications in physical systems.	
PRELIMINARY EXAM FROM MARCH 24TH 2019 TO APRIL 4TH 2019					

Prepared By **AYEESHA SHARIF**