|  |  |
| --- | --- |
|  SUBJECT: SCIENCE | **SYLLABUS FOR THE ACADEMIC YEAR 2021-2022** |
|  OPTION: PHYSICS |
|  GRADE: 9 |
| Month  | Date | No.of days | Topics | Sub Topics | Lead |
|
| April |  11-15 | 5 | CH 8-Motion | Describing motion.Motion along a straight Line | Mr. Jasif |
| 18-22 | 5 | CH 8-Motion | Uniform motion and non-uniform motion,Measuring rate of motion, |
|  25-29  | 5 | CH 8-Motion | speed  |
| May |  2-6 | 5 | CH 8-Motion | speed with direction,Rate of change of velocity,Graphical representation of motion |
|  9-13 | 2 | CH 8-Motion | Distance-Time graph, Velocity -time Graph, |
|  16-20 | 5 | CH 8-Motion | Equation of motion by Graphical Representation.Uniform Circular Motion |
|  23-27 | 5 | CH 9 : Force and Laws of motion | Balanced and unbalanced force,First law of motion,Inertia and mass ,Second law of motion |
|  30-31 | 2 | CH 9 : Force and Laws of motion | Mathematical derivation of second law of motion. |
| June |  1-3 | 3 | CH 9 : Force and Laws of motion | Third law of motion, Conservation of momentum |
|  6-10 | 5 | CH 9 : Force and Laws of motion | Problems related to conservation of momentum |
|  13- 17 | 5 | Revision  | Chapter 8 |
| 20-24 | 5 | Revision  | Chapter 9 |
| 27-30 | 4 | CH 10 : Gravition | Gravitation, Universal law of gravitation |
| August | 29-31 | 3 | CH 10 : Gravition | Universal law of gravitation |
| September |  1-2 | 2 | CH 10 : Gravition | Motion of objects under the influence of gravitational force of the earth |
|  5-9 | 5 | CH 10 : Gravition | Free fall , To calculate the value of g |
|  12-16 | 5 | CH 10 : Gravition | Mass and weight ,Weight of an object on moon |
| 19- 23 | 5 | **Revision** |
| 26- 30 | 5 | **First Semester Examination**  |
| October |  3-7 | 5 | **First Semester Examination**  |
| 10 14 | 5 | Chapter 10 : Gravitation | Thrust and pressure ,Pressure in fluid |
| 17 -21 | 4 | Chapter 10 : Gravitation | Buoyancy,Why objects float or sink when placed on the surface of water. |
| 24-28 | 5 | Chapter 10 : Gravitation | Archimede's Principle,Relative density |
| November |  1- 4 | 4 | Chapter 11 : Work and energy | Work ,Scientific concept of work,work done by a constant force |
|  7-11 | 5 | Chapter 11 : Work and energy | Energy, Forms of energy,KE, Potential energy |
|  14- 18 | 5 | Chapter 11 : Work and energy | Potential energy of an object at a height, |
| 21-25 | 5 | Chapter 11 : Work and energy | Law of conservation of energy, Rate of doing work,Commercial unit of energy |
| 28-30 | 3 | Chapter 12 : Sound  | Production of sound, Propagation of sound |
| December |  5-9 | 5 | Chapter 12 : Sound  | Sound need a medium to propagate, sound waves are longitudinal wave |
| January |  2-6  | 5 | Chapter 12 : Sound  | Characteristics of sound,Speed of sound in defferent medium |
|  9-13 | 5 | Chapter 12 : Sound  | Reflection of sound,Echo, |
| 16-20 | 5 | Chapter 12 : Sound  | Reverbaration,Uses of multiple reflection, |
| 23-27 | 4 | Chapter 12 : Sound  | Range of hearing |
| 30-31 | 2 | Chapter 12 : Sound  | Aplication of Ultrasound ,sonar |
| February |  1-3 | 3 | Chapter 12 : Sound  | Structure of human eye |
|  6-10 | 5 | Revision | Chapter 10 |
|  13-17 | 4 | Revision  | Chapter 11 |
|  20-24 | 5 | Revision | Chapter 12 |
|  27-28 | 2 | **Revision** |
| March |  1-3 | 3 | **Revision** |
|  6-10 | 5 | **Annual Examination** |
|  13-17 | 5 | **Annual Examination** |