



Delhi Public School Srinagar

LESSON PLAN

Session 2015-2016

Class : XI
Subject : Physics
For the Month(s) of : October (last 10 days)
Theme : Gravitation
Periods : 9

OBJECTIVES (CONCEPTS & SKILLS:) :

- *Newton's law of Gravitation and superposition principle.*
- *Gravity, acceleration due to gravity(g) and its variation with altitude & depth.*
- *Concept of field and gravitational field intensity.*
- *Gravitational potential and Gravitational potential energy.*
- *Escape velocity and Orbital velocity.*
- *Kepler's law of planetary motion.*
- *Weightlessness.*

The teacher will keep the following skills in view:

- *Scientific Aptitude*
- *Thinking skills*
- *Reasoning Skills*
- *Attentiveness*
- *Listening Skills*

LEARNING OUTCOMES :

- Make it sure that the student learns the concepts given.
- Gravitational force and calculation of gravitational force between any two objects.
- Gravitational force as a two body problem.
- Gravity as a special case of gravitation, acceleration due to gravity(g), factors affecting 'g', weight and difference between mass & weight.
- Action at a distance and gravitational field intensity.
- Calculation of potential and potential energy
- Factors on which the escape speed of a body depends, Principle of launching a satellite and terms related to its motion.
- Effects of weightlessness.

INSTRUCTIONAL TOOLS & REFERENCES : *General teaching aids.*

The References used will be : 1.Physics text book.(part I &II) 2.Concepts of physics by H.C. Verma .

PEDAGOGY :

- i. *Activating Prior Knowledge by Random Questioning*
- ii. *Introducing the topic to be taught after getting the expected response from the students.*
- iii. *Developing hypothesis by (a) Brainstorming, (b) Lecture , (c) Discussion and (d) In Text Questions*

ACTIVITY/ASSIGNMENT/PROJECTS : *The teacher will give Home Assignments and the areas of assessment will be:*

Content of Knowledge, Presentation, Correctness, Time Management and Thinking skills

ASSESSMENT :

1. Checking the note making on given topic, 2.Asking questions related to topic , 3.Home work , 4.In text questions

FA₂ & SA₂ SYLLABUS :

FA syllabus: System of particles and Rotational motion, Gravitation.

SA syllabus: All Units.