

CLASS 11

PHYSICS

REVISION NOTES

Class 11 Physics Chapter 13 Oscillations – Revision Notes

Quick revision notes for Class 11 Physics Chapter 13 (Oscillations). These Class 11 Physics Chapter 13 notes are ideal for quick revision just before exams.

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SHM Basics

Condition: $a = -\omega^2 x$.

$x = A \sin(\omega t + \phi)$; $v = A\omega \cos(\omega t + \phi)$; $a = -A\omega^2 \sin(\omega t + \phi)$.

Energy

$E = \frac{1}{2}m\omega^2 A^2$ (constant); KE and PE interconvert.

Time Periods

Simple pendulum: $T = 2\pi\sqrt{l/g}$.

Spring-mass: $T = 2\pi\sqrt{m/k}$.

One-Line Summary

Oscillations describe periodic to-and-fro motion, with simple harmonic motion being the special case where restoring force is proportional to displacement, conserving total mechanical energy throughout.

Class 11 Physics Chapter 13 – Solutions and Important Questions

Need full answers or more practice? See the [Class 11 Physics Chapter 13 Solutions](#) and [Class 11 Physics Chapter 13 Extra Questions](#).

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