



## INDIAN SCHOOL AL WADI AL KABIR

<b>Class: XI</b>	<b>Department: SCIENCE</b> <b>SUBJECT : PHYSICS</b>	<b>Date of submission:</b> <b>16.09.2020</b>
<b>REVISION WORKSHEET FOR PRACTICE</b>		<b>Note:</b> <b>A4 FILE FORMAT</b>
<b>NAME OF THE STUDENT</b>	<b>CLASS &amp; SEC:</b>	<b>ROLL NO.</b>

1. Check the correctness of the equation  $v=u+at$
2. Define relative velocity. Derive expression for relative displacement between two bodies.
3. Draw velocity time graph for uniformly accelerated motion.
4. Derive displacement -time relation graphically.
5. Show that the path of the projectile is parabola.
6. Write the expression for time of flight, maximum height, and maximum range (Numerical)
7. Write the expression for centripetal acceleration
8. State law of conservation of linear momentum. Derive the expression for it.
9. Expression for static friction and kinetic friction/ difference/limiting static friction
10. Derive expression – elastic collision in one dimension.
11. Different types of work/examples.
12. State work- energy theorem/proof.
13. Write the expression for potential energy stored in a spring.
14. Derive expression for position-time, velocity-time and velocity- displacement relations of uniformly accelerated motion in one dimension graphically.
15. On the basis of dimensions, decide which of the following relations for the displacement of a particle undergoing simple harmonic motion is not correct:

(a)  $y = a \sin 2\pi t / T$

(b)  $y = a \sin vt.$

(c)  $y = \frac{a}{T} \sin \left( \frac{t}{a} \right)$

(d)  $y = a\sqrt{2} \left( \sin \frac{2\pi t}{T} - \cos \frac{2\pi t}{T} \right)$

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