



THE VILLAGE
INTERNATIONAL SCHOOL
"We Nurture Dreams"

GRADE - XI	MT- 2 [2023-2024] PHYSICS	Max Marks - 20 TIME - 1 Hrs
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Section A		
1	(c) $M^1L^1T^2$	1
2	(d) 4	1
3	c) $k/4$	1
4	A) If both assertion and reason are true and the reason is the correct explanation of the assertion.	1
Section B		
5	Using Dimensional analysis ST $M^1L^{-1}T^{-2} = M^1L^{-1}T^{-2}$	2
6		2

Commented [Ap1]:

	Section C	
7	$H = \frac{u^2 \sin^2 \theta}{2g} = 30.6 \text{ m}$ $T = \frac{2u \sin \theta}{g} = 5 \text{ s}$ $R = \frac{u^2 \sin 2\theta}{g} = 212.1 \text{ m}$	3
	Section D	
8	<p>Fig. projectile</p> <p>H displacement</p> <p>V displacement</p> $H = \frac{u^2 \sin 2\theta}{2g}$ $T = \frac{2u \sin \theta}{g}$ $R = \frac{u^2 \sin 2\theta}{g}$	5
	Section E	
9	<p>1.(c) 80 s</p> <p>2.(a) 50 km/h</p> <p>3.(a) 17.14 m/s</p> <p>4(b) 2</p>	1X4=4