YEAR 13A/ B –PHYSICS

WEEK 2 (6th Sept to 10th Sept) 3 lessons for both batches

Work sent to the students through: Google classroom / Zoom Learning Platform

Topic: - Linear Momentum in 1 D and 2 D

Date	Class	Lesson	Lesson objectives & Learning outcome	Mode of teaching	
7th Sept Monday **8th Sept** Tuesday	**13 B** **13 A**	6 4	**L.O-** Investigate and apply the principle of conservation of linear momentum to problems in one dimension. **Learning outcomes-** Make calculations based on the conservation of linear momentum to determine energy changes in collisions Explain the difference between elastic and inelastic collisions Calculate impulses and changes in momentum. Derive and use the expression $Ek = p^2/2m$ for the kinetic energy of a non-relativistic particle.	**Zoom**	Teacher uses power point presentation and breakout sessions to guide students through the process.
7th Sept Monday **10th** Sept Thursday	**13 B** **13 A**	7 1	**L.O :** Analyse and interpret data to calculate the momentum of (non-relativistic) particles and apply the principle of conservation of linear momentum to problems in one and two dimensions **Learning outcomes-** Resolve velocities into components and construct and solve equations for conservation of momentum in two dimensions Determine the final velocity and direction of one	**zoom**	Teacher uses power point presentation and breakout sessions to guide students through the process.

			colliding object after a collision with another object at an angle.		
9th Sept Wednesday **10th** Sept Thursday	**13 B** **13 A**	3 2	**L.O –** Analyse and interpret data to calculate the momentum of (non-relativistic) particles and apply the principle of conservation of linear momentum to problems in one and two dimensions (contd) **Learning outcomes-** Identify the use of Pythagoras theorem and trigonometry in vector diagrams; to solve numerical problems.	**zoom**	Teacher uses power point presentation and breakout sessions to guide students through the process.

YEAR 13 A/ B –PHYSICS

WEEK 2 (6th Sept to 10th Sept) - 3 lessons for both batches

Work sent to the students through: Whatsapp group / Google classroom / Zoom Learning Platform

Topic: - Electric fields.

Resources: Student text book, interactive power point, Board works and online

Date	Lesson	Lesson objectives & Learning outcome	Mode of teaching	
7th Sept Monday **- 13 A** **8th** Sept Tuesday **- 13 B**	1 6	**L.O –** Explain what is meant by an electric field and recognise and use the expression electric field strength $E = F/Q$ **Learning outcomes-** State that electric fields are created by electric charges. Define electric field strength as force per unit positive charge ($E=F/q$). Give the unit of E as N/C and express N/C in terms of base units	**Zoom**	Teacher uses power point presentation to explain the concepts and guide students through the process.
7th Sept Monday **- 13 A** 10th Sept Thursday **- 13 B**	2 3	**L.O –** Use Coulomb's law in the form $F = kQ_1Q_2/r^2$ for the force between two point charges in free space or air. **Learning outcomes-** State Coulomb's law to describe the size of the force between two point charges. Discuss the fact that the field strength obeys inverse square law with distance and predict the graph. Make calculations of the electrostatic force between charged particles.	**Zoom**	Teacher uses boardworks & power point presentation to explain the concepts and guide students to solve problems.
8th Sept Tuesday	5	**L.O –** Verify Coulomb's law experimentally	**Zoom**	Students plan an expt to show

- 13 A **10th** Sept Thursday **- 13 B**	4	**Learning outcomes-** Discuss an experiment using electronic balance to measure the force between two charges.		that Coulomb's law follows an inverse square relationship.