YEAR 13 A /B –CHEMISTRY

WEEK 10 (1st November to 5th November)
Topic: Organic chemistry

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

Resources: Text book, Worksheets, video, power point presentations.

Date	**Topic**	
1.11.20 Sunday **1-13A** **4-13B** **Mode of Teaching –** Zoom	**Lesson Objective:** Assessment 3 **Success Criteria:** Assess the knowledge of Aids ,bases and buffers	Teacher uses Google Forms
Sunday 1.11.20 **2-13 A** 3.11.20 Tuesday **2-13B** **Mode of Teaching –** Zoom	**Lesson Objective:** Draw displayed structure and identify chiral centre. **Success Criteria: students will be able to:** -define optical isomers -recall drawing skeletal structure -locate chiral centre -declare the compound as optically active or inactive. -draw structures of enantiomers **Lesson Objective:** know that optical activity is the ability of a single optical isomer to rotate the plane of polarisation of plane-polarised monochromatic light in molecules containing a single chiral centre **Success Criteria: students will be able to:** - Draw 3D representations of optical isomers; Understands that optical isomers rotate plane polarised light in opposite directions	Teacher uses power point presentation that contains interactive questions that helps to find chirality. Students solve the worksheet file questions.

	Explain the term 'optically active'	
Wednesday 4.11.20 **4- 13A** **2-13B** **Mode of Teaching –** Zoom	**Lesson Objective:** understand the nature of a racemic mixture be able to use data on optical activity of reactants and products as evidence for S_N1 and S_N2 mechanisms **Success Criteria: students will be able to:** **Predict** why mixture of optical isomers may be optically active/ inactive. Correlate that S_N2 results in inversion of rotation and S_N1 forms a racemic mixture. Write the mechanism to prove the inversion of optical rotation Write the addition to carbonyl compounds to show racemic mixture formation	Teacher uses power point presentation that contains interactive questions that helps to find the chiral centre. Students solve the worksheet file questions .

Homework : Solve worksheet file questions

YEAR 13 A/B– CHEMISTRY

WEEK 10 (1st Nov to 5th Nov)
Work Sent to the students through Zoom Learning Platform / Google classroom
Topic:– Redox titrations and methods of measuring the rate of reaction

Resources: Text book, Worksheet, Video , Board works , power point

Date	**Topic**	
1.11.20 Sunday 4 **13A** 5 **13B** **Mode of Teaching –**	**Learning Objective:** Reinforce the concept of structured and non-structured titration calculations including Fe^{2+}/MnO_4^-, and $I_2/S_2O_3^{2-}$. Understand the methods used in redox titrations. **Learning Outcome:** Solve redox titrations calculations in a problem solving context, e.g. % of Fe in an iron tablet; cleaning solutions, % of copper in an alloy, etc.	Teacher uses textbook questions and power point to introduce the concept of redox titrations. Students solve worksheet questions on

Zoom		redox titrations.
1.11.20 Sunday 8 **13B** 4.11.2020 Wednesday 5 **13A** **Mode of Teaching –** Zoom	**Learning Objective:** 1. understand the terms: i rate of reaction ii rate equation iii order with respect to a substance in a rate equation iv overall order of reaction v rate constant vi half-life vii rate-determining step viii activation energy ix heterogeneous and homogenous catalyst 2.to determine and use rate equations of the form: rate = k[A]m[B]n, where m and n are 0, 1 or 2 **Learning Outcome:** Explain and use the terms: rate of reaction, rate equation, order and rate constant, activation energy Explain and use the term: half life and rate determining step; **Explain** with example homogeneous catalyst: I^- and $S_2O_8^{2-}$ and heterogeneous catalyst: Fe in Haber process. Write the rate equation for a given reaction.	Teacher uses PowerPoint presentation and video or animation to demonstrate any reaction to explain the different terms. Teacher uses worksheet that contains interactive questions, to solve the questions on rate of reaction, rate equation, order and rate constant, activation energy. Teacher uses past paper questions to assess the concept of different methods used to measure the rate of reaction .
3.11.20 Tuesday 1 **13B**	**Learning Objective:** Assessment 4	Questions will be given in Google Forms.

4.11.2020 Wednesday **6 13A** **Mode of Teaching –** Zoom	**Learning Outcome:** Assess the concept of electrochemical cells, fuel cell, storage cells and redox titrations	

HOMEWORK: Solve textbook question page 144