YEAR 13 A /B –CHEMISTRY

WEEK 9 (25th Oct to 28th Oct)
Topic: Acid and Base equilibrium.

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

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

Date	**Topic**	
25.10.20 Sunday **1-13A** **4-13B** **Mode of Teaching –** Zoom	**Lesson Objective: MORE PRACTICE OF EXAM STYLE QUESTIONS** - 'buffer solution'and calculations. - action of a buffer solution - roles of carbonic acid molecules and hydrogen carbonate ions in controlling the pH of blood. **Success Criteria: students will be able to:** -define buffer solution - explain buffer action with an appropriate example. - Will be able to write the equations to show buffer action for an acidic buffer $CH_3COOH/CH_3COO^-Na^+$ system and the alkaline buffer NH_3/NH_4^+ system. - understand the roles of carbonic acid molecules and hydrogen carbonate ions in controlling the pH of blood **Lesson Objective:** - revision of AS organic, basic principles of organic chemistry.	Teacher uses power point presentation that contains interactive questions. Students solve the worksheet file questions. Teacher uses power point presentation
Sunday 25.10.20 **2-13 A** 27.10.20 Tuesday **2-13B** **Mode of**	**Success Criteria: students will be able to:** - recall different types of reactions -different types of isomerism -identify reaction intermediate	that contains interactive questions. Students solve the worksheet file questions.

Teaching – Zoom		
Wednesday 28.10.20 **4- 13A** **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	Teacher uses power point presentation that contains interactive questions that helps to find the concentration. Students solve the worksheet file questions.

Homework : Solve worksheet file questions and text book questions page 170.

YEAR 13 A/B– CHEMISTRY

WEEK 9 (25th Oct to 28th Oct)
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**	
25.10.20 Sunday 4 **13A** 5 **13B** **Mode of Teaching –** Zoom	**Learning Objective:** Be able to carry out both 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:** Carry out redox titrations calculations in a problem solving context, e.g. % of Fe in an iron tablet; cleaning solutions, % of copper in an alloy, etc. Write the steps in the procedure, note the end point and using the redox equation to do calculations for different redox reactions.	Teacher uses textbook questions and power point to introduce the concept of redox titrations. Students solve worksheet questions on redox titrations.
18.10.20 Sunday	**Learning Objective:** 1. understand the terms:	Teacher uses PowerPoint presentation and video or animation to demonstrate any reaction to explain the

8 **13B** 28.10.2020 Wednesday 5 **13A** **Mode of Teaching –** Zoom	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.	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.
27.10.20 Tuesday 1 **13B** 28.10.2020 Wednesday	**Learning Objective:** to select and justify a suitable experimental technique to obtain rate data for a given reaction, including: i titration ii colorimetry iii mass change iv volume of gas evolved	Instructions will be given to complete chapter questions. Teacher uses past paper questions to assess the concept of different methods used to measure the rate of reaction .

6 13A **Mode of Teaching –** Zoom	v other suitable technique(s) for a given reaction **Learning Outcome:** Suggest experimental methods suitable for the study of the rate of a reaction colorimetry, titrations, volume of gas evolved, mass change according to the reaction given. eg reaction of $CaCO_3$ + HCl mass change and volume of gas formed, colorimetry for iodine reactions	

HOMEWORK: Solve textbook question page 104 -105