LOVE DALE CENTRAL SCHOOL, BELGAUM

LEARNING OUTCOMES and STRATEGIES **Session: 2021-2022**

Subject: CHEMISTRY **Grade: X**

Lesson no	***Lesson (Chapter)***	***Learning Outcomes***	***Strategies (Activities)***
1	Chemical reactions and equations	**Students would be able to;** – Relate chemical changes to a daily life situations – Convert chemical change into word equation – Substitute it by symbols and formula – Correlate law of conservation to balancing chemical equations – Observe the changes to determine a chemical reaction – Demonstrate types of chemical reactions – Compare the different types of reactions – Classify the reactions as oxidation or reduction – Compare the reaction – Apply oxidation in daily life (Corrosion and Rancidity)	* To perform and observe the different chemical reactions and classify them * To solve the assignments on formulating and balancing chemical equations * To make a chart on different techniques to be used to prevent (reduce) rancidity of food
2	Acids, Bases, Salts	**Students would be able to;** – Identify the substances as acids or bases *List the properties of acids and bases after performing the activities – Compare the properties of acids and bases – Correlate the pH to acidic, basic or neutral substances. – Test the pH values of solutions – Classify the substances into acids	* To perform and study few properties of acids and bases * To test and predict the pH values of different solutions by using pH papers or universal indicators

		& bases by noting the color of pH paper – Discuss the importance of pH in everyday life – Associate formation of salts to various reactions – Substitute the names of salts by their formulae – Identify the parent acid and base from which the salt is formed – Tabulate the salts into their families – Predict and check the pH of few common salts – Justify the various uses of salts in daily life and industry	
3	Metals and Non-metals	**Students would be able to;** – Identify metals and non-metals from the given samples based on their physical properties – Arrange metals into ascending and descending order of reactivity * Predict the occurrence of various reactions – Perform experiments on various reactions – Draw schematic diagrams for ionic compounds (electron dot representation) *Acquire the knowledge of various methodologies used for extraction of metals based on their reactivity	* To observe the action of different metals on the given salt solutions and to arrange the metals based on their reactivity * To draw the elctron dot structure of ionic compounds (by transferring of electrons) and present on chart paper
4	Carbon and its Compounds	**Students would be able to;** * Compile the various substances that are used in daily life which contain carbon – Illustrate carbon with 4 valence electrons forming only covalent bonds – Correlate the bonds formed as single, double or triple to the	* To perform and observe the different properties of ethanoic acid * To perform and compare the cleaning action of a sample of soap in soft water and hard water * To do reasearch and write about 'various types of organic compounds used in

		number of pairs of electrons shared between them – Connect electronic dot structure of atoms for the formation of covalent bonds * Assign the IUPAC names to the organic compounds * Illustrate different chemical reactions perofrmed by organic compounds * Distinguish between the properties of soaps & detergents and their cleaning action	our daily life (at least 10) and represent covalent bond formation among them with neat & labelled diagram' (elctron dot representation)
5	Periodic Classification of Elements	**Students would be able to;** * Classify elements according to their properties – Discover salient features of each classification – Understand the changes in classification over time – Correlate the properties with atomic mass – Find out the achievements and limitations of each classification – Discover the salient features of the periodic table – Appreciate the periodic trends in the properties of elements – Predict the properties of the element from its position in the periodic table – Associate the electronic configuration of a particular element to its atomic number – Calculate the number of valence electrons and the valency of an element – Draw inference from the given data	* To make charts of Mendeleev's Periodic Table and Modern Periodic Table * To draw a concept map of the lesson including brief of each topic