CONDENSED COURSEGENERAL SCIENCE
Grade 8th

Content			Time Allocated Teaching +Assessment)	Remarks
Unit No & Name	Topics	Student Learning Outcome		
Unit 1 Human Organ System	1.1. Human Nervous System 1.2. Reflex Action	• Describe the structure and functions of the nervous system • Describe the working of nervous system through a model • Explain a reflex action with an example • Differentiate between voluntary and involuntary actions they have experienced	04+01	
Unit 2 Heredity in Organisms	2.1. Cell Division 2.2. Heredity 2.3. Basis of Heredity	• Differentiate between meiosis and mitosis • Identify DNA and chromosomes in the cell diagram • Define heredity and recognize its importance in transferring of characteristics from parent to offspring	05+01	
Unit 3 Biotechnology	3.2. introduction of gene into Bacterium 3.3. Genetic Modification	• Define bacterium • Explain how genes are introduced into bacterium • Explain the genetic modification	02+01	
Unit 4 Pollutants and their Effects on Environment	4.2. Effects of Human activities on Environment 4.3.5. Responsibilities for all	• Identify the human activities that have long term adverse consequences on the environment • Explain the Greenhouse effect • Design a model to explain the Greenhouse effect • Describe the causes and effects of ozone depletion	04+01	

		• Carry out a research to explain global warming and its likely effects on life on earth • Explain the formation of acid rain. Identify the consequences of acid rain on living and nonliving things • Define deforestation • State the effects of deforestation on the environment • Explain the importance of local and global conservation of natural resources • Plan and conduct a campaign that can help to reduce air pollution in their local environment • Suggest ways in which individuals, organization and government can help to make earth a better place to live		
Unit 5 Chemical Reactions	5.1. Chemical Reactions 5.2. Balancing the Chemical Equations	• Define chemical reactions and give examples • Explain the rearrangement of atoms in chemical reactions • Explain balancing of a chemical reaction • Write balanced chemical equations for a variety of chemical reactions	03+01	
Unit 6 Acids, Alkalis and Salts	6.1. Acids 6.2. Alkalis 6.3. Salts	• Define the terms acid, alkali and salt • Describe the properties of acids, alkalis and salts • Explain the reaction between an acid and an alkali • Describe the importance of neutralization reactions in daily life • Write three chemical equations from the given list of acids and alkalis	06+01	
Unit 7 Force and Pressure	7.1. Pressure , Force and Area 7.1.1. Units of Pressure 7.2. Water Pressure 7.3. Pascal's Law 7.4. Gas pressure in a closed container	• Define the term pressure • Identify the units of pressure • Describe the causes of gas pressure in a container	04+01	
Unit 8	8.1. Physical Quantities	• Define a physical quantity with examples	05+01	

Measurement of Physical Quantities	8.2.1. Length 8.2.3.Mass 8.2.4.Time	• Apply the prefixes milli-, kilo-, centi and interpret the units • Interconvert smaller units and bigger units • Select and use measuring instruments		
Unit 9 Sources and Effects of Heat Energy	9.1. Sources and Effects of Heat Energy 9.2. Thermal Expansion and Contraction 9.2.1.Effect of Heat on Solids 9.2.3. Effect of Heat on Gases	• Describe the sources and effects of heat • Explain thermal expansion of solids, liquids and gases • Explore the effects and applications of expansion and contraction of solids • Describe the working of thermometer	04+01	
Unit 10 Lenses	10.1.Lenses 10.2.Types of lenses 10.2.1.Principal Focus and Focal Length of Lenses	• Define lens • Differentiate between the different types of lenses •	03+01	
Unit 11 Electricity in Action	11.1.Generating Electricity 11.1.1How does a Power Station work?	• Design an experiment to generate electricity • Explain the working of the model generator • Design and demonstrate the working of a power station	03+01	
Unit 12 Exploring Space	12.2. Space Exploration 12.2.4 Technological tools used in Space Exploration	• Describe development of tools and technologies used in space exploration • Identify the technological tools used in space exploration	02+01	