Academic Planner 2025-26								
	SUBJECT - SCIENCE							
MONTHS & DAYS	CONTENTS	LEARNING OUTCOMES	ACTIVITY / EXPERIMENT	ASSIGNMENT/H.W	MODE OF ASSESSMENT	ASPECT/ SUSTAINED IMPACT SDG	21 CENTURY SKILLS	TEACHING PEDAGOGY
APRIL								
1- 15 (10 days		BRIDGE C	OURSE	·				
16 - 30 (12 da)	Chapter 1 Crop Production & Management	 Appreciate different scientific steps involved in crop production and its management. Approximate different agricultural tools, irrigation and farming techniques. 	To separate healthy seeds from damaged seeds	Thinking Classroom Worksheet -Ch 1 , Educosoft online assessment	Group assignments and projects/ Information gathering and deducing	Agriculture and Biology/Chemistry: The study of crop production involves biology, particularly the growth process of plants, photosynthesis, and plant reproduction. The use of fertilizers and pesticides in agriculture relates to chemistry, as these substances are chemical compounds designed to boost plant growth or control pests.	Creativity Collaboration Communication	Cooperative and Collaborative Learning: Encouraging students to learn together and from each other, fostering teamwork and communication skills.
			Science lab manual activity of Ch 1					
16 - 30 (12 da)	Chapter 2 Micro- organism	 Classify different types of microbes. Justify the title of the chapter through various daily life activities of microbes. appreciate the role of vaccines correlating it with the need of the hour. 	To study fermentation of sugar solution by yeast.	Thinking Classroom Worksheet -Ch 2, Educosoft online assessment	Interactive Quizzes/Science Concept Cards	Biology and Chemistry: This chapter deals with microorganisms—organisms too small to be seen by the naked eye—and explores both their beneficial (e.g., in fermentation and decomposition) and harmful effects (e.g., causing diseases). The interaction of microorganisms with	Critical thinking Information literacy Media literacy	Inquiry-Based Learning: Students are encouraged to ask questions, explore, and investigate scientific concepts through inquiry-based methods
			activity of Ch 2					
<u>МАҮ</u> 1 - 15 (11 days)	Chapter 3 Coal & Petroleum	 Distinguish between renewable and nonrenewable resources. Estimate the formation of coal and petroleum and their extraction from the earth's surface. approximate the products obtained after destructive distillation and fractional distillation of coal and 	In an outline map of India trace the coal, petroleum reserves and oil refineries of india.	Thinking Classroom Worksheet -Ch 3, Educosoft online assessment	Think-Pair-Share/Student Presentations	Geography and Chemistry: The chapter explains the formation of coal and petroleum over millions of years, a concept tied to geology and geography. The chemical processes involved in refining petroleum and its derivatives (like gasoline and plastics) link chemistry with industry.	Problem solving Adaptibility Analytic reasoning	Critical Thinking and Problem-Solving: The pedagogy aims to develop students' ability to think critically, analyze problems, and find solutions. Project-Based Learning (PBL) – Students work on real-world projects to develop skills.

			Science lab manual activity of Ch 3					
MAY								
16-25 (8 Days)	THE SCIENCE OF EVERYTHING AROUND US		SCIENCE IS FUN (DIY ACTIVITIES)					
	SUMMER VACATION		HOLID AYS					
1- 15 (12 days)	Chapter 4 Combustion and Flame	 Explain the three necessary conditions for combustion by various activities. classify different types of combustion on the basis of products formed. explain the different zones of a candle flame. Relates processes and phenomenon with causes like smog formation, global warming and acid rain. 	To study air is necessary for combustion	Thinking Classroom Worksheet -Ch 4, Educosoft online assessment	Presentations on science concepts/ experiments	Physics and Chemistry: Combustion, the process of burning substances, involves both chemical reactions (the combination of oxygen with a fuel to release energy) and physical processes (like heat and light production). The study of flames and fire involves understanding energy changes, which ties into physics and thermodynamics. Safety and Technology: The study of combustion and flames is essential in fire safety, as well as in the design of engines, heaters, and other technologies that rely on controlled combustion (e.g., in automobiles and power plants). SDG-7 AND SDG-12	self direction problem solving collaboration	Experiential Learning: Learning should be based on experiences, allowing students to connect scientific concepts to their daily lives. Field Trips, Simulations, and Interactive Workshops field trips, simulations, and interactive workshops into their curriculum, allowing students to apply theoretical knowledge in practical
			Science lab manual activity of Ch 4					
			·					
16 - 31 (14 day	Chapter 5 Conservation of Plants and Animals	 Estimate the role of different plants and animal species. appreciate the need to conserve these species. State the different divisions of these species. 	To classify the given plants and animals as endemic, endangered and extinct species.	Thinking Classroom Worksheet -Ch 5, Educosoft online assessment	Information gathering and deducing,Science Journals	Biology and Environmental Science: This chapter deals with the conservation of biodiversity, including endangered species, and the importance of maintaining ecological balance. It integrates biology with environmental science, especially focusing on habitat preservation, ecosystems, and sustainable development.	Global Awareness communication Flexibilty	Interdisciplinary Teaching – Connecting multiple subjects for a broader perspective.
			Science lab manual activity of Ch 5					
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	U.T.1. (21 July- 26 July)		Syllabus for UT-1:					
AUGUST	···· (_····) _····,		Chapters-1,2,3					
1- 15 (11 days	Chapter 6 Reproduction in animals	Explain the male and the female reproductive system. Explain how are babies formed?	To study budding in hydra and binary fission in Amoeba	Thinking Classroom Worksheet -Ch 6, Educosoft online assessment	Concept Mapping,Use of online platforms (like Kahoot, Quizizz, or Google Forms) for quizzes with immediate feedback	Biology and Health: This chapter explains the biological process of reproduction in animals, including both asexual and sexual reproduction. It connects with human biology and health education by explaining reproductive health and the role of genes in heredity.	Critical thinking Creativity Collaboration Communication Information literacy	Concept Mapping – Visually organizing information to enhance understanding.
			activity of Ch 6					
16-31 (12 days	Chapter 7 Reaching the age of adolescence	Estimate the physical and emotional changes a teenager experiences. Distinguish between oviparous and viviparous organisms. Estimate challenging myths and taboos regarding Adolescence.	*Prepare charts or posters and paste them in the class so that students are aware of the diet for adolescents. *Students may use their creative ideas and present it like an advertisement.	Thinking Classroom Worksheet -Ch 7 Educosoft online assessment CLASS RECORD ASSESSMENT	Self-Assessment and Reflection,Peer Review	Biology and Health Education: This chapter deals with the physical and emotional changes that occur during adolescence, relating to the endocrine system (hormones). It ties into health education and understanding the physical and psychological aspects of growing up. Psychology and Social Studies: The chapter's focus on emotional well-being and changes in behavior during	Problem solving Adaptibility Analytic reasoning	Concept Mapping – Visually organizing information to enhance understanding.
SEPTEMBER								
1- 15 (11 days)	Revision							
16 - 30 (12 day	HALF YEARLY EXAMS (15 Sept- 26 Sept)		SYLLABUS OF HALF YEARLY Chapter 1 Crop					
			Production & Management					
			Chapter 2 Micro-organism Chapter 3 Coal & Betroloum					
			Chapter 4 Combustion					
			and Flame Chapter 5 Conservation					
			of Plants and Animals Chapter 6 Reproduction in					
			animals Chapter 7 Reaching the					
			age of adolescence					
OCTOBER								

	Chapter 8 Force and	Differentiate contact & non-	To show that liquids evert	Thinking Classroom	Digital Tools (e.g. Padlet	Physics and Chemistry: Force	Critical thinking	Experiential Learning:
1- 15 (8 days)	pressure	contact forces, Pressure in solids and fluids on the basis of different properties. • Solve numerical on balanced and unbalanced forces, resultant force.	equal pressure at same depth and pressure varies with depth.	Worksheet -Ch 8, Educosoft Online Assessment	Flipgrid) where students can post responses, videos, or images about scientific concepts,Group assignments and projects	and pressure are primarily studied in physics, but they also tie into chemistry when we consider how pressure can affect chemical reactions (e.g., the pressure involved in chemical synthesis and gas reactions). Engineering and Technology: The study of pressure is critical in engineering, especially in designing structures, vehicles, and machinery that can withstand forces. It is also essential in understanding how hydraulics and pneumatics work in machines. SDG-10	Creativity Collaboration Communication	Learning should be based on experiences, allowing students to connect scientific concepts to their daily lives. Gamification – Using game elements (points, badges, competitions) to enhance learning.
			Science lab manual					
	Chapter 9 Friction	a justify why friction is a	To obcorve that friction	Thinking Classroom	Saionaa Concent	Physics and Engineering: The	Critical thinking	Interdisciplinary Teaching
16 - 31 (10 da	y	• Justiny Why friction is a necessary evil. • state the factors that can increase or decrease friction.	depends on the smoothness of the surface.	Worksheet -Ch 9, Educosoft Online Assessment	Cards,Interactive Simulations	Physics and Engineering: The concept of friction is a key part of physics, explaining how two surfaces interact. In engineering, understanding friction helps design more efficient machines, tires, and materials. The reduction of friction is important in technologies like lubricants and ball bearings. S.D.G Worksheet-14 Goal 14	Creativity Creativity Collaboration Communication	Connecting multiple subjects for a broader perspective.
			Science lab manual activity of Ch 9					
NOVEMBER								
1- 15 (11 days	Chapter 10 Sound	Estimate the properties of a wave and correlate it with a sound wave. explain the structure of the human ear and how to take care of it.	To show that sound can travel through solids	Thinking Classroom Worksheet -Ch 10, Educosoft Online Assessment	Think-Pair-Share, Sound Detective" Activity- Play a variety of sounds (e.g., a bell, a car horn, a bird chirping, a drum) and ask students to identify the source of the sound and describe its characteristics	Physics and Biology: Sound is a physical phenomenon that involves the vibration of particles, studied in physics. It also relates to biology, particularly in how we hear and process sound in the ear (the auditory system).	Leadership Initiative Productivity Social skills	Inquiry-Based Learning: Students are encouraged to ask questions, explore, and investigate scientific concepts through inquiry-based methods
			activity of Ch 10					

16 - 30 (13 day	Chapter 11 Chemical effects of electric current	Explain the different components involved in electrolysis. Illustrate the application of electrolysis.	To demonstrate the process of electroplating.	Thinking Classroom Worksheet -Ch 11, Educosoft Online Assessment	Presentations on science concepts/ experiments,Investigations for stated problems	Physics and Chemistry: This chapter explores how electric current can cause chemical changes, linking electricity (physics) with chemistry, particularly in processes like electrolysis.	Critical thinking Creativity Collaboration Communication Social skills	Experiential Learning: Learning should be based on experiences, allowing students to connect scientific concepts to their daily lives.
			Science lab manual activity of Ch 11					
DECEMBER								
	U.T-2 (8 DEC-15 DEC)		Syllabus for U1-2 : Chapters- 8,9,10					
1-15 (12)	Chapter 12 Some Natural phenomena	• Estimate lightning and earthquake as two natural phenomena- their causes, effects and preventive measures.	To show with the help of exp.that like charges repel each other and unlike Charges attract each other.	Thinking Classroom Worksheet -Ch 12, Educosoft Online Assessment	explanation of different natural phenomenon using scientific principles.,MCQs and Science Quiz	Physics and Earth Science: This chapter explores natural phenomena like lightning, electricity, and static charges, linking physics with meteorology and earth	Critical thinking Creativity Collaboration Communication	Inquiry-Based Learning: Students are encouraged to ask questions, explore, and investigate scientific concepts through inquiry-based methods
			Science lab manual activity of Ch 12					
16-31 (13 days	Chapter 12 Continued							
JANUARY								
Jan 1-15	WINTER BREAK	Annual state that the second second	To construct the large of	Think in a Olympic second	Ostanas Osmaant		0.111.111.111.111	For a standard to a section.
16-31 (13 days	Chapter 13 Light	 Appreciate the importance of reflection in everyday life. Construct materials like kaleidoscope, periscope by applying the concept of multiple reflection of light. Explain the structure of the human eye and its different components. 	To verify the laws of reflection of light using a plane mirror	Thinking Classroom Worksheet -Ch 13, Educosoft Online Assessment	Science Concept Cards,Interactive Simulations	Physics and Technology: The behavior of light, including reflection, refraction, and dispersion, is a key part of optics in physics. Understanding light is essential in the design of lenses, cameras, and optical instruments. Biology: The study of light is	Critical thinking Creativity Collaboration Communication Information literacy	Experiential Learning: Learning should be based on experiences, allowing students to connect scientific concepts to their daily lives. Blended Learning – A mix of traditional and digital learning methods.
						especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		
			Science lab manual activity of Ch 13			also important in biology, especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		
FEBRUARY			Science lab manual activity of Ch 13			also important in biology, especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		
FEBRUARY			Science lab manual activity of Ch 13 Educosoft Online Assessment			also important in biology, especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		
FEBRUARY	REVISION OF ANNUAL EXAM		Science lab manual activity of Ch 13 Educosoft Online Assessment			also important in bology, especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		
FEBRUARY	REVISION OF ANNUAL EXAM		Science lab manual activity of Ch 13 Educosoft Online Assessment CLASS RECORD ASSESSMENT			also important in bology, especially in the process of photosynthesis and the way light affects vision. SDG-7 ,SDG-8 ,SDG-12		

		TERM1 AND TERM 2- ALL THE CHAPTERS			
		COMPLETE BOOK			
March					
1-31 (25 DAY	ANNUAL EXAM				