

INDIAN SCHOOL AL WADI AL KABIR - SYLLABUS BREAK UP FOR NOVEMBER 2019-20 CLASS XI - SCIENCE

SUBJECT	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5
ENGLISH	Grammar- Editing Task Reordering of Sentences LANDSCAPE OF THE SOUL	ARTICLE WRITING SPECCH WRITING SILK ROAD ASL	DEBATE WRITING Note Making and Summarizing THE GHAT OF THE ONLY WORLD ASL	Birth Comprehension Passage Grammar:- Editing – Omission PRACTICE WORKSHEET	
PHYSICS	THERMAL PROPERTIES OF MATTER Heat, temperature, thermal expansion. Thermal expansion of solids, liquids and gases, anomalous expansion of water. specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity.	Heat transfer- conduction, convection and radiation, thermal conductivity. Qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law, Green house effect	THERMODYNAMICS Thermal equilibrium and definition of temperature (zeroth law of thermodynamics), heat, work and internal energy. First law of thermodynamics, isothermal and adiabatic processes. Second law of thermodynamics: reversible and irreversible processes,	BEHAVIOUR OF PERFECT GASES AND KINETIC THEORY OF GASES Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom. Law of equi-partition of	

			Heat engine and refrigerator.	energy (statement only). and application to specific heat capacities of gases; concept of mean free path, Avogadro's number.
PHYSICS (PRACTICALS)	LAB TOPICS: Cycle II /CY 1 Screw Gauge II 2 Vernier Callipers II 3 Parallelogram law 4 Spring constant 5 Newton's law of cool Surface tension			
CHEMISTRY	Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of Hydrogen.	Hard and soft water, Heavy water. Hydrogen peroxide - preparation, reactions and structure and use. Hydrogen as fuel.	S-BLOCK ELEMENTS Group 1 and Group 2 Elements General introduction, Diagonal relationship, Trends in the variation of properties,	THE P – BLOCK ELEMENTS General Introduction to Group 13 Elements: General introduction, Trends in chemical reactivity, Boron, Aluminium – physical and chemical properties,

	Hydrides-ionic	Trends in chemical	important	
	covalent and	reactivity	compounds	
	interstitial. Physical and chemical properties of water	Uses, General characteristics of compounds of alkali metals, Anomalous properties of Li,Some important chemical compounds of Sodium., Biological importance of Sodium, Potassium, Group 2 elements, Biological importance of Magnesium and Calcium	Uses Group 14 Elements: Introduction, Trends in chemical reactivity, Carbon-catenation, allotropic forms, physical and chemical properties Uses of Carbon, Compounds of Silicon, Uses: Silicon Tetrachloride, Silicones, Silicates and Zeolites, their uses.	
CHEMISTRY	PRACTICAL:			
	Analysis of Salt VIII			
ACTICALS)	VOLUMETRIC ANALYSIS –I			

MATHEMATICS	Sequence And Series And Straight Lines	Straight Lines	Straight Lines and Conics	Conics	Conics and 3D
MATHEMATICS PRACTICALS)	Sequence And Series Activity 17 An alternative approach t Conics Activity 22 To construct a parabola.	to obtain formula for the	sum of squares of first n natu	ural numbers.	
BIOLOGY		Cell cycle and cell division	Biomolecules	Plant kingdom	Animal kingdom
BIOLOGY (PRACTICALS)	LAB TOPICS: Families – 3 Morphology - modification	ions			
INFORMATICS	DBMS Models, Relational Database, database key, Overview of SQL and MySQL.	Features of SQL, advantages of SQL, classification of SQL statements,	MySQL basics, data types, commands, integrity constraints- primary key and foreign key	viewing constraints, viewing the columns associated with constraints.	

INFORMATICS (PRACTICALS)	1) Writing SQL commands to create database, create table using constraints and Inserting records. 2) Creating a Customer table and Product table under the database MYDB	1) Writing SQL commands to create database, create table using constraints and Inserting records. 2) Creating a Supplier table and Product table under the database MYDB	1.Writing SQL commands to create database, create table using constraints and Inserting records. 2.Creating a Employee table under the database MYDB	1) Writing SQL commands to use relational and logical operator over a table. 2) Inserting at least 10 records in each Customer and Product table and perform the range comparison using Relational and Logical operators.	1) Writing SQL commands to display the records using IN, NOT IN, BETWEEN clauses over a table. 2) Display the records which are matched with the Numeric or String comparison using IN, NOT IN, BETWEEN clause in the Customer table.
COMPUTER SCIENCE	Introduction to Python modules: Importing math (sqrt, cell, floor, pow, fabs, sin, cos, tan, random (random, randint, randrange), statistics (mean, median, mode) modules.	Relational databases: Concept of a database, relations, attributes and tuples, keys- candidate key, primary key, alternate key, foreign key; Degree and cardinality of a table.	Use SQL – DDL/ DML commands to CREATE TABLE, INSERT INTO, UPDATE TABLE, DELETE FROM, ALTER TABLE, MODIFY TABLE, DROP TABLE	Keys, and foreign keys; to view content of a table: SELECT- FROMWHERE-ORDER BY alongwith BETWEEN, IN, LIKE, (Queries only on single table	
COMPUTER SCIENCE (PRACTICAL)	Program to perform the Insertion Sort on a list of Strings Program to perform the Insertion Sort on a list of Numbers.	Program to perform the String comparison. Program to perform the String Concatenation and extracting sub string)	1) Writing SQL commands to create database, create table using constraints and Inserting records. 2) Creating a Student table and Stock table under the database MYDB	1) Writing SQL commands to use relational and logical operator over a table. 2) Inserting at least 10 records in each Student and Stock table and perform the range comparison using Relational and Logical operators.	1) Writing SQL commands to display the records using IN, NOT IN, BETWEEN clauses over a table. 2) Display the records which are matched with the Numeric or String comparison using IN, NOT IN, BETWEEN clause in the Student table.

PSYCHOLOGY	UNIT VII HUMAN MEMORY • Nature of memory • Information processing approach • Memory systems	 Levels of processing Types of LTM Knowledge representation and organization Memory as a constructive process Nature and causes of forgetting 	 Enhancing memory UNIT VIII THINKING Nature of thinking Problem solving Reasoning 	 Decision making Creative thinking Barriers to creative thinking Strategies for creative thinking Thought and language 	
PSYCHOLOGY (PRACTICAL)			SHORT TERM MEMORY		
	Machine block 6 Machine block 7	Machine block 11	Machine block 15	Machine block 15 Machine block 16	Weekend
ENGINEERING GRAPHICS	Machine block 8	Machine block 12	Machine block 16	Machine block 17	
	Machine block 9	Machine block 13	Machine block 17	Machine block 18	
	Machine block 10 LAB TOPICS	Machine block 14	Machine block 18		

	Chart paper modeling of sectioning of solids					
WORK EXPERIENCE	Prepare a result analysis report and calculate average, percentage based on the marks.	Prepare an excel sheet on student details and insert appropriate header and footer in a file and do center alignment.	Prepare an excel sheet using the concept of cell formatting and using percentage numeric format	Prepare a sheet using the concept of IF statement to find the performance and grades of students based on total marks and display pass or fail	Prepare a report on the sales performance of the employees and calculate the commission	
GENERAL STUDIES	Project file Topics based on *Green Technology *Nano Technology *Bio Technology					
PE	*Bio Technology Definition & Importance of Psychology in Phy. Edu. & Sports Discussions/Sharing of Personal social Experience Psychology & Sports Define & Differentiate Between Growth & Development Study of natural growth Developmental Characteristics At Different Stages of Development Asking questions Adolescent Problems & Their Management giving solutions and ideas					

