

Usha Martin School, Malda Session:-2024-25 Class:- XI (B) (GATI)

Subject	Periodic Test-I	Half Yearly Examination	Periodic Test-II	Annual Examination
English	HORNBILL Prose 1. The Portrait of a Lady 2. We're Not Afraid to Die if We Can All Be Together Poem 1. A Photograph 2. The Laburnum Top SNAPSHOTS Prose 1. The Summer of the Beautiful White Horse 2. The Address GRAMMAR 1. Tenses WRITING SKILL 1. Note making	Prose 1. Discovering Tut: the Saga Continues 2. The Portrait of a Lady 3. We're Not Afraid to Die if We Can All Be Together Poem 1. A Photograph 2. The Laburnum Top 3. The Voice of the Rain 4. Childhood SNAPSHOTS Prose 1. The Summer of the Beautiful White Horse 2. The Address 3. Birth GRAMMAR 1. Clauses WRITING SKILL 1. Poster Making 2. Debate 3. Speech	HORNBILL Prose 1. The Adventure 2. Discovering Tut: the Saga Continues 3. The Portrait of a Lady Poem 1. Father to Son 2. The Voice of the Rain 3. Childhood SNAPSHOTS Prose 1. Mother's Day GRAMMAR 1. Tenses 2. Clauses WRITING SKILL 1. Classified Advertisement 2. Poster making	Prose 1. Silk Road 2. Discovering Tut: the Saga Continues 3. The Portrait of a Lady 4. We're Not Afraid to Die if We Can All Be Together 5. The Adventure Poem 1. A Photograph 2. The Laburnum Top 3. The Voice of the Rain 4. Childhood 5. Father to son SNAPSHOTS Prose 1. The Tale of Melon City 2. The Summer of the Beautiful White Horse 3. The Address 4. Birth 5. Mother's Day GRAMMAR

				1. Transformation of Sentences 2. Clauses WRITING SKILL 1. Poster Making 2. Debate 3. Classified Advertisement 4. Speech
Physics	BOOK: NCERT PHYSICS NCERT EXEMPLAR • Chapter 2: Units and Measurements. • Chapter 3: Motion in a Straight Line. • Chapter 4: Motion in a Plane • Chapter 5: Laws of Motion.	• Chapter 2: Units and Measurements. • Chapter 3: Motion in a Straight Line. • Chapter 4: Motion in a Plane • Chapter 5: Laws of Motion. • Chapter 6: Work, Energy, and Power. • Chapter 7: System of Particles and Rotational Motion. • Chapter 8: Gravitation PRACTICAL SYLLABUS 1. To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Callipers and hence find its volume. 2. To measure diameter of a given wire and thickness	NCERT EXEMPLAR Chapter 7: System of Particles and Rotational Motion. Chapter 8: Gravitation Chapter 9: Mechanical properties of solids. Chapter 10: Mechanical properties of fluids. Chapter 11: Thermal properties of matter	BOOK: NCERT PHYSICS NCERT EXEMPLAR Chapter 2: Units and Measurements. Chapter 3: Motion in a Straight Line. Chapter 4: Motion in a Plane Chapter 5: Laws of Motion. Chapter 6: Work, Energy, and Power. Chapter 7: System of Particles and Rotational Motion. Chapter 8: Gravitation Chapter 9: Mechanical properties of solids. Chapter 10: Mechanical properties of fluids. Chapter 11: Thermal properties of matter Chapter 12: Thermodynamics

- of a given sheet using screw gauge.
- 3. To determine volume of an irregular lamina using screw gauge.
- 4. To determine radius of curvature of a given spherical surface by a spherometer.
- 5. To determine the mass of two different objects using a beam balance.
- To find the weight of a given body using parallelogram law of vectors.
- 7. Using a simple pendulum, plot its L-T2 graph and use it to find the effective length of second's pendulum.
- 8. To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.

- Chapter 13: kinetic theory of gases
- Chapter 14: oscillations
- Chapter 15: Waves

PRACTICAL SYLLABUS

- 1. All the practicals from half yearly syllabus
- 2. To study the relationship between force of limiting friction and normal reaction and to find the co- efficient of friction between a block and a horizontal surface.
- 3. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination θ by plotting graph between force and Sinθ.
- 4. To determine the coefficient of viscosity of a given viscous liquid by measuring terminal velocity of a given spherical body.

				 5. To study the relationship between the temperature of a hot body and time by plotting a cooling curve. 6. To study the relation between frequency and length of a given wire under constant tension using sonometer
Chemistry	BOOK:	BOOK:	BOOK:	BOOK:
	1. NCERT CHEMISTRY	1. NCERT CHEMISTRY PART	1. NCERT CHEMISTRY	1. NCERT CHEMISTRY
	PART (PART I + PART	(PART I + PART II)	PART (PART I + PART II)	PART (PART I + PART II)
	(II) 2 MODERN'S ARC+	2. MODERN'S ABC+	2. MODERN'S ABC+	2. MODERN'S ABC+
	2. MODERN'S ABC+ CHEMISTRY (PART I +	CHEMISTRY (PART I + PART 2) Unit 1 Some basic concepts of	<u>CHEMISTRY (PART I +</u> <u>PART 2)</u>	<u>CHEMISTRY (PART I +</u> PART 2)
	PART 2)	Chemistry	Unit 6 Equilibrium	Unit 1 Some basic concepts
	Unit 1 Some basic	Unit 2 Structure of Atom	Unit 8 Organic Chemistry	of Chemistry
	concepts of Chemistry	Unit 3 Classification of Elements	 Some basic principles 	Unit 2 Structure of Atom
	Unit 2 Structure of Atom	and Periodicity in properties	and techniques	Unit 3 Classification of
	Unit 3 Classification of	Unit 4 Chemical Bonding and	ana teemiquee	Elements and Periodicity in
	Elements and Periodicity	Molecular structures		properties
	in properties	Unit 5 Thermodynamics		Unit 4 Chemical Bonding
		Unit 7 Redox Reactions		and Molecular structures
	PRACTICAL			Unit 5 Thermodynamics
	COMPREHENSIVE	PRACTICAL PRACTICAL		Unit 8 Organic Chemistry –
	PRACTICAL	COMPREHENSIVE PRACTICAL	<u>PRACTICAL</u>	Some basic principles and
	<u>CHEMISTRY</u>	<u>CHEMISTRY</u>	<u>COMPREHENSIVE</u>	techniques
			PRACTICAL CHEMISTRY	Unit 6 Equilibrium
	1.Preparation of	1.Preparation of standard		Unit 7 Redox Reactions
	standard solution of	solution of Oxalic acid.	1.Crystallization of impure	Unit 9 Hydrocarbon
	Oxalic acid.	2.Determination of strength of a	sample of any one of the	PRACTICAL
	2.Determination of	given solution of Sodium	following: Alum, Copper	COMPREHENSIVE
	strength of a given	hydroxide by titrating it against	Sulphate, Benzoic Acid.	PRACTICAL CHEMISTRY
	solution of Sodium	standard solution of Oxalic acid.	2.Detection of -Nitrogen,	1.Preparation of standard
	hydroxide by titrating it	3.Preparation of standard	Sulphur, Chlorine in	solution of Oxalic acid.
		solution of Sodium carbonate.	organic compounds.	

	against standard solution of Oxalic acid. 3.Preparation of standard solution of Sodium carbonate. 4.Determination of strength of a given solution of hydrochloric acid by titrating it against standard Sodium Carbonate solution	4. Determination of strength of a given solution of hydrochloric acid by titrating it against standard Sodium Carbonate solution 5. Determination of one anion and one cation in a given salt. Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator Investigatory project will be given.		2.Determination of strength of a given solution of Sodium hydroxide by titrating it against standard solution of Oxalic acid. 3.Preparation of standard solution of Sodium carbonate. 4.Determination of strength of a given solution of hydrochloric acid bytitrating it against standard Sodium Carbonate solution 5. Determination of one anion and one cation in a given salt. Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator 6.Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid. 7.Detection of -Nitrogen, Sulphur, Chlorine in organic compounds Investigatory project
Biology	(NCERT BOOK AND EXEMPLAR) +	(NCERT BOOK AND EXEMPLAR) 	(NCERT BOOK AND EXEMPLAR) 	(NCERT BOOK AND EXEMPLAR)
	MODERN ABC Unit-I Diversity of Living	MODERN ABC Unit-I Diversity of Living	MODERN ABC Unit-III Cell: Structure and Function	Unit-I Diversity of Living Organisms Chapter-1: The Living
	Organisms	Organisms		World

Chanter 1. The Living	Chapter 1. The Living World	Chapter O. Call The Unit of	
Chapter-1: The Living World	Chapter-1: The Living World	Chapter-8: Cell-The Unit of Life	Chapter-2: Biological
VVOIId	Chapter-2: Biological	LIIE	Classification
Chapter-2: Biological	Classification	Chapter-9: Biomolecules	Classification
Classification	Classification	Chapter-9. Biomolecules	Chapter 2: Plant Kingdom
Classification	Chapter 2: Plant Kingdom	Chapter 10: Call Cycle	Chapter-3: Plant Kingdom
Chapter 2: Plant	Chapter-3: Plant Kingdom	Chapter-10: Cell Cycle and Cell Division	Chapter 4: Animal Kingdom
Chapter-3: Plant	Chapter A. Animal Kingdom	and Cell Division	Chapter-4: Animal Kingdom
Kingdom	Chapter-4: Animal Kingdom	Linit IV Diant Dhysiology	Unit-II Structural
Chapter 4. Animal		Unit-IV Plant Physiology	
Chapter-4: Animal	Linit V. Liuman Dhysiology	Chapter 11.	Organization in Plants and
Kingdom	Unit-V Human Physiology	Chapter-11:	Animals
Linit V Lives on	Chapter-14: Breathing and	Photosynthesis in Higher	Chantay F. Mayabalany of
Unit-V Human	Exchange of Gases	Plants	Chapter-5: Morphology of
Physiology		Observation 10 Description in	Flowering Plants
Chapter-14 : Breathing	Unit-II Structural Organization in	Chapter-12: Respiration in	Observation O. Association of
and Exchange of Gases	Plants and Animals	Plants	Chapter-6: Anatomy of
			Flowering Plants
	Chapter-5: Morphology of	Chapter-13: Plant - Growth	
	Flowering Plants	and Development	Chapter-7: Structural
			Organisation in Animals
	Chapter-6: Anatomy of Flowering		
	Plants		Unit-III Cell: Structure and
			Function
	Chapter-7: Structural		
	Organisation in Animals		Chapter-8: Cell-The Unit of
			Life
	Unit-V Human Physiology		
			Chapter-9: Biomolecules
	Chapter-15: Body Fluids and		
	Circulation		Chapter-10: Cell Cycle and
			Cell Division
	PRACTICAL		Unit-IV Plant Physiology
	EXPERIMENTS		Chapter-11: Photosynthesis
	1. Study and describe locally		in Higher Plants
	available common flowering		
	plants, from family Solanaceae		Chapter-12: Respiration in
	(Poaceae, Asteraceae or		Plants
	Brassicaceae can be substituted		
	בומססוטמטטמט טמוו אם סטאסוונעופע	1	

in case of particular geographical location) including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams), type of root (tap and adventitious); type of stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).

- 2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
- 3. Study of osmosis by potato osmometer.
- 6. Comparative study of the rates of transpiration in the upper and lower surfaces of leaves.
- 8. Separation of plant pigments through paper chromatography.
- 9. Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.
- 10. Test for presence of urea in urine.
- 11. Test for presence of sugar in urine.
- B. Study and Observe the following (spotting):
- 1. Parts of a compound microscope.
- 2. Specimens/slides/models and identification with reasons Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one

Chapter-13: Plant - Growth and Development

Unit-V Human Physiology Chapter-14: Breathing and Exchange of Gases

Chapter-15: Body Fluids and Circulation

Chapter-16: Excretory Products and their Elimination

Chapter-17: Locomotion and Movement

Chapter-18: Neural Control and Coordination

Chapter-19: Chemical Coordination and Integration

PRACTICAL EXPERIMENTS

1. Study and describe locally available common flowering plants, from family Solanaceae (Poaceae, Asteraceae or Brassicaceae can be substituted in case of particular geographical location) including dissection and display of floral whorls, anther and

dicotyledonous plant and one	ovary to show number of
lichen.	chambers (floral formulae
3. Virtual	and floral diagrams), type of
specimens/slides/models and	root (tap and adventitious);
identifying features of - Amoeba,	type of stem (herbaceous
Hydra, liver fluke, Ascaris, leech,	and woody); leaf
earthworm, prawn, silkworm,	(arrangement, shape,
honey bee, snail, starfish, shark,	venation, simple and
rohu, frog, lizard, pigeon and	compound).
rabbit.	2. Preparation and study of
	T.S. of dicot and monocot
	roots and stems (primary).
	3. Study of osmosis by
	potato osmometer.
	4. Study of plasmolysis in
	epidermal peels (e.g.
	Rhoeo/lily leaves or flashy
	scale leaves of onion bulb).
	5. Study of distribution of
	stomata on the upper and
	lower surfaces of leaves.
	6. Comparative study of
	the rates of transpiration in
	the upper and lower
	surfaces of leaves.
	7. Test for the presence of
	sugar, starch, proteins and
	fats in suitable plant and
	animal materials.
	8. Separation of plant
	pigments through paper
	chromatography.
	9. Study of the rate of
	respiration in flower
	buds/leaf tissue and
	germinating seeds.
	10. Test for presence of
	urea in urine.

		11. Test for presence of
1		sugar in urine.
		12. Test for presence of
		albumin in urine.
		13. Test for presence of bile
		salts in urine.
		B. Study and Observe the
		following (spotting):
		1. Parts of a compound
		microscope.
		2. Specimens/slides/models
		and identification with
,		reasons - Bacteria,
,		Oscillatoria, Spirogyra,
		Rhizopus, mushroom,
		yeast, liverwort, moss, fern,
		pine, one
		monocotyledonousplant,
		one dicotyledonous plant
		and one lichen.
		3. Virtual
		specimens/slides/models
		and identifying features of -
		Amoeba, Hydra, liver fluke,
		Ascaris, leech, earthworm,
,		prawn, silkworm, honey
		bee, snail, starfish, shark,
		rohu, frog, lizard, pigeon
		and rabbit.
		4. Mitosis in onion root tip
		cells and animals cells
		(grasshopper) from
		permanent slides.
1		5. Different types of
,		inflorescence (cymose and
,		racemose).
		6. Human skeleton and
		different types of joints with

Mathematics (Regular Mathematics)	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Sets 2. Relations and Functions 3. Trigonometric functions 4. Sequence and Series 5. Permutations and Combinations	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1.Trigonometry Function 2.Complex number and Quadratic Equation 3.Sequence and Series 4. Permutations and Combinations 5. Sets 6. Relations and Functions 7. Limits 8. Straight line 9. Trigonometry Function	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Conic Sections 2. Derivatives 3. statistics	the help of virtual images/models only MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1.Trigonometry Function 2.Complex number and Quadratic Equation 3.Sequence and Series 4. Permutations and Combinations 6. Sets 7. Relations and Functions 8. Limits 9. Straight line 10.Conic Sections 11.Derivatives 12.Statistics 13.Binomial Theorem 14. Probabilities
Mathematics (Applied Mathematics)	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Sets 2. Relations and Functions 3. Number, Quantification and numerical Applications	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Sets 2. Relations and Functions 3. Number, Quantification and numerical Applications 4. Sequence and Series	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Descriptive mathematics 2. Basic of financial Mathematics	MATHEMATICS (NCERT BOOK AND EXEMPLAR) 1. Sets 2. Relations and Functions 3. Number, Quantification and numerical Applications 4. Sequence and Series

	4. Sequence and Series5. Permutations and Combinations	 5. Permutations and Combinations 6. Limits and derivatives and functions 7. Probability 8. Coordinate geometry (straight line, circle and parabola) 		 Permutations and Combinations Limits and derivatives and functions Probability Coordinate geometry (straight line, circle and parabola) Descriptive mathematics Basic of financial Mathematics Mathematical Reasoning
Physical Education	CH: 1.Changing Trends and Career in Physical Education. CH: 2. Olympism CH: 3. Yoga.	CH: 1.Changing Trends and Career in Physical Education. CH: 2. Olympism CH: 3. Yoga. CH: 4. Physical Education & Sports for CWSN (Children with special needs – DIVYANG) CH: 5. Physical Fitness, Health and Wellness. CH: 6. Test, Measurement & Evaluation. PRACTICAL-1: Fitness test Administration. (SAI Khelo India Test) PRACTICAL-2: Procedure for Asana, benefits & Contraindication for any two Asana for each Lifestyle disease.	CH: 7. Fundamentals of Anatomy, Physiology in sports. CH: 8. Fundamentals of Kinesiology and Biomechanics in sports. CH: 9. Psychology &Sports.	CH: 1.Changing Trends and Career in Physical Education. CH: 2. Olympism CH: 3. Yoga. CH: 4. Physical Education & Sports for CWSN (Children with special needs – DIVYANG) CH: 5. Physical Fitness, Health and Wellness. CH: 6. Test, Measurement & Evaluation. CH: 7. Fundamentals of Anatomy, Physiology in sports. CH: 8. Fundamentals of Kinesiology and Biomechanics in sports. CH: 9. Psychology &Sports. CH: 10. Training and Doping in Sports.

				PRACTICAL-1: Fitness test Administration. (SAI Khelo India Test) PRACTICAL-2: Procedure for Asana, benefits & Contraindication for any two Asana for each Lifestyle disease. PRACTICAL-3: Any One IOA recognized Sports/ Game Of choice. Labelled Diagram of Field & Equipment. Also mention its Rules, Terminologies & Skills.
Painting	Pre-historic Rock Paintings and Art of Indus Valley	Buddhist, Jain and Hindu Art	Temple Sculptures, Bronzes and Artistic Aspects of Indo-Islamic Architecture	Pre-historic Rock Paintings and Art of Indus Valley Buddhist, Jain and Hindu Art Temple Sculptures, Bronzes and Artistic Aspects of Indo-Islamic Architecture
Computer Sc	COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA) Ch1:- Computer System Overview Ch2:- Data Representation CH3:- Boolean Logic	COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA) Ch 4:- Introduction to Problem Solving Ch 5:- Getting Started with Python Ch 6:- Python Fundamentals Ch 7:- Data Handling Ch 8:- Introduction to Python Module Ch9:- Flow of Control Ch10:-String Manipulation PRACTICAL	COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA) Ch11:- List Manipulation CH12:- Tuples CH13::- Dictionaries	COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA) Ch1:- Computer System Overview Ch2:- Data Representation CH3:- Boolean Logic Ch5:- Introduction to Problem Solving Ch6:- Getting Started with Python Ch7:- Python Fundamentals Ch8:- Data

		 Input a welcome message and display it. Input two numbers and display the larger / smaller number. Input three numbers and display the largest / smallest number. Determine whether a number is a perfect number, an Armstrong number or a palindrome. Input a number and check if the number is a prime or composite number. Display the terms of a Fibonacci series. Compute the greatest common divisor and least common multiple of two integers. Count and display the number of vowels, consonants, uppercase, lowercase characters in string. Input a string and determine whether it is a palindrome or not; convert the case of characters in a string 		Handling Ch9:- Flow of Control Ch10:-String Manipulation Ch11:- List Manipulation Ch 12:- Tuples CH13:- Dictionaries Ch 14:- Cyber Safety Ch 15:- Society, Law and Ethics PRACTICAL • Find the largest/smallest number in a list/tuple • Input a list of numbers and swap elements at the even location with the elements at the odd location. • Input a list/tuple of elements, search for a given element in the list/tuple. • Create a dictionary with the roll number, name and marks of n students in a class and display the names of students who have marks above 75.
Informatics Practices	Computer System Semerging Trend Brief overview of Python	1. Computer System 2.Emerging Trend 3. Brief overview of Python 4. Working with List and Dictionaries 5. Understanding Data Practical (Python) 1. To find average and grade for given marks.	6.Introduction to NumPy 7. Database Concepts 8. Introduction to Structured Query Language	1. Computer System 2.Emerging Trend 3. Brief overview of Python 4. Working with List and Dictionaries 5. Understanding Data 6.Introduction to NumPy 7. Database Concepts 8. Introduction to Structured Query Language

2. To find sale price of an item with given cost and discount (%). 3. To calculate perimeter/circumference and area of shapes such as triangle, rectangle, square and circle. 4. To calculate Simple and Compound interest. 5. To calculate profit-loss for given Cost and Sell Price. 6. To calculate EMI for Amount. Period and Interest. 7. To calculate tax - GST / Income Tax. 8. To find the largest and smallest numbers in a list.

9. To find the third

largest/smallest number in a list.

10. To find the sum of squares of

the first 100 natural numbers.

Practical (Python)

11. To print the first 'n' multiples of given number.
12.To count the number of vowels in user entered string. 13.To print the words starting with a alphabet in a user entered string.
14.To print number of occurrences of a given alphabet in each string.
15.Create a dictionary to store names of states and their capitals.

16.Create a dictionary of students to store names and marks obtained in 5 subjects. 17.To print the highest and lowest values in the dictionary.

(DBMS)

- To create a database
 To create student table with the student id, class,
- with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key.
- 3. To insert the details of at least 10 students in the above table.
- 4. To display the entire content of table.
- 5. To display Rno, Name and Marks of those students who are scoring marks more than 50.

		6. To display Rno, Name, DOB of those students who are born between '2005-01-01' and '2005-12-31'.
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