P.7 MATH TERM ONE 2023 TOPICAL BREAK DOWN

	TOPIC	SUB TOPIC	CONTENT	COVERED/ NOT COVERED
1	**Set Concepts**	**Finite and infinite sets**	Revising different types of sets Equal sets, Equivalent sets, Empty/Null sets, Complement, etc	
		Identifying finite sets	What finte sets are. Examples of finite sets	
		Identifying infinite sets	What infinite sets are. Examples of infinite sets	
		Subsets	Forming subsets from finite sets	
			Deriving formula for finding number of subsets	
			Applying formula to find number of subsets	
			Determining the number of elements for subsets	
		Venn diagrams of 2 events	Representing information on a venn diagram	
			Solving problems involving venn diagrams In a class of 30 pupils, 18 like music (m), 21 like art (a) and some like both. Using the Venn diagram, find the no. of pupils who like both subjects	
			Application of sets Example: In a family of 10 members, 6 members eat meat (m), 5 members eat both meat and fish while x members eat fish only. Using a venn diagram, how many members eat fish?	
			Application of sets Example: In a village with 60 farmers, 36 grow rice, 24 grow beans, 10 grow both crops while t grow none of the above crops. Use the Venn diagram to find the value of t.	
		Probability	Working out probability of simple events	
			Working out probability of events using venn diagrams	
			END OF TOPICAL TEST	
	WHOLE NUMBERS	**Numbers up to 99,999,999**	Forming numbers using given digits	
2			Finding place values of digits in a number	

			Finding values digits up tp 99,999,999	
			Finding sum, product and difference of place values and values of digits	
			Reading and writing numbers in words up tp 99,999,999	
			Reading and writing words in figures	
		Roman numerals	Reading and writing roman numerals	
			Converting roman numerals to hindu Arabic	
			Converting hindu Arabic to roman numerals	
		BASES	Grouping in twos	
			Place values of base two digits	
			Changing base two numerals to base ten	
			Changing from base ten to base two	
			Adding numbers in base two	
			Subtraction of numbers in base two	
			Multiplication of numbers in base two	
			Finding place values of digits in other bases	
			Changing numbers from other bases to base ten	
			Changing base ten numerals to other bases	
			Finding missing or unknown bases	
			END OF TOPICAL ASSESSMENT	
3	**OPERATIONS ON WHOLE NUMBERS**	**The four basic operations**	Addition of whole numbers	
			Subtraction of whole numbers	
			Multiplying whole numbers by 3 digit numbers	
			Dividing whole numbers by 3 digit numbers	
			Using the commutative property	
			Using the associative property	

			Using the distributive property	
			Expanded form using indices	
			Laws of indices in multiplication Application of indices with multiplication	
			Laws of indices in division Application of indices with division	
			Expanding numbers using exponents	
		Standard form	Expressing numbers in standard form (scientific notation)	
		Prime factorisation	**Prime factorisation of numbers** using; Ladder method Factor tree method Representing prime factors using multiplication, set notation(set notation) or power form	
			Representing prim factors in venn diagrams	
			Finding unknown values on venn diagrams	
			Finding LCM by prime factorisation	
			Finding GCF by prime factorisation	
			Finding square numbers	
			Finding square roots of numbers	
			Finding square roots of fractions	
			Finding square roots of decimals	
			END OF TOPICAL ASSESSMENT	
4	**NUMBER PATTERNS AND SEQUENCES**	**Test of divisibility**	Review of divisibility test of 2,3 and 5	
			Using divisibility test for 6	
			Using divisibility test for 8	
			Using divisibility test for 9	
			Using divisibility test for 11	
		Numbers	Finding square numbers	
			Finding cube numbers	

			Finding triangle numbers	
			Identifying prime and composite numbers	
			Identifying even and odd numbers	
		Number patterns and sequences	Reading sequences and finding missing numbers	
			Finding consecutive odd and even numbers	
		Magic squares	Completing magic squares	