SCHEME OF STUDIES AND CENTRALIZED SLO BASED SYLLABUS BREAK-UP
GRADE VI – EXTREME SUMMER ZONE

Subject: Mathematics **Class: 6**

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
1. Factors and Multiples: Integers: (25day)		Students will be able to:		K	U	A		Timeline
	(1):Factors:	1	Recognize factors of given numbers	✓			2	05-01-2026 to 06-01-2026
		2	Find all the factors of two digit numbers			✓	2	07-01-2026 to 8-01-2026
	(2): Multiples:	3	Recognize multiples of given numbers	✓			1	09-01-2026
		4	Write multiples of given numbers		✓		2	10-01-2026 to 12-01-2026
	(3): Perfect Square:	5	Recognize square roots of two digit numbers	✓			1	13-01-2026
		6	Calculate the square root of two digit numbers			✓	2	14-01-2026 to 15-01-2026
		7	Find the square roots of given numbers of upto 3-digits			✓	2	16-01-2026 to 17-01-2026
	(4): Prime Factorization:	8	Find the prime factors of given numbers and express its factors in the index notation			✓	2	19-01-2026 to 20-01-2026
	(5): Highest Common Factor (HCF):	9	Calculate the HCF of 2-digit and 3-digit numbers using prime factors			✓	2	21-01-2026 to 22-01-2026
		10	Find the HCF by prime factors method			✓	2	23-01-2026 to 24-

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
								01-2026
		11	Find the HCF of given numbers by long division method			✓	2	26-01-2026 to 27-01-2026
	(6): Least Common Multiples (LCM)	12	Find the LCM of given numbers by prime factors method			✓	2	28-01-2026 to 29-01-2026
		13	Find the LCM of given numbers by long division methods			✓	2	30-01-2026 to 31-02-2026
		14	Find the relation between HCF and LCM			✓	2	02-02-2026 to 03-02-2026
		15	Solve problems using HCF and LCM in real life situations.			✓	2	04-02-2026 t0 06-02-2026
2. Integers	(1): Natural and whole numbers	1	Identify integers	✓			1	07-02-2026
		2	Represent integers on number line		✓		2	09-02-2026 to 10-02-2026
		3	Arrange given integers in ascending and descending orders		✓		2	11-02-2026 to 12-02-2026
	(2): addition and subtraction of integers	4	Add, subtract integers			✓	2	13-02-2026 to 14-02-2026
	(3): Division and multiplication of integers	5	Multiply and divide integers			✓	2	16-02-2026 to 17-02-2026
	(4): Properties of integers with respect to	6	Verify commutative property of addition and multiplication of integers.			✓	2	18-02-2026 to 19-02-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
	addition and multiplication:	7	Verify associative property of addition and multiplication of integers			✓	2	20-02-2026 to 21-02-2026
	(5): Distributive laws	8	Verify distributive law of multiplication over addition of integers			✓	2	23-02-2026 to 24-02-2026
		9	Verify distributive law of multiplication over subtraction of integers			✓	2	25-02-2026 to 26-02-2026
	(6): Additive and Multiplicative inverse	10	Identify additive and multiplicative inverse of given numbers		✓		2	27-02-2026 to 28-02-2026
	(7): BODMAS Rule	11	Use BODMAS Rule to solve mathematical operations (addition, subtraction, multiplication, division)			✓	2	02-03-2026 to 03-03-2026
3. **Ratio, Rate and Percentage**	(1): Ratio:	1	Recognize ratios	✓			2	04-03-2026 to 05-03-2026
		2	Calculate the ratio of numbers/quantities up to 3-digits			✓	3	06-03-2026 to 09-03-2026
REVISION							10	10-03-2026 to 19-2026
3. Ratio, Rate and Percentage	1): Ratio:	3.	Reduce a given ratio into its lowest form			✓	2	24-03-2026 to 25-03-2026
		4.	Explain continuous ratio		✓		2	26-03-2026 to 27-03-2026
		5	Express the relation between ratio and fraction		✓		2	28-03-2026 to 30-03-2026
		6	Explain rate as comparison of two quantities measured in different units.		✓		1	31-03-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
	(2): Percentage	7	Define percentage	✓			2	01-04-2026 to 02-04-2026
		8	Express one quantity as percentage of another		✓		2	03-04-2026 to 04-04-2026
		9	Compare two quantities by percentage		✓		2	06-04-2026 to 07-04-2026
		10	Solve problems related to increase or decrease in a quantity by a given percentage.			✓	2	08-04-2026 to 09-04-2026
		11	Solve the problems of ratio, rate and percentage in relation to real life situations.			✓	2	10-04-2026 to 11-04-2026
4. Sets:	(1): Sets	1	Define set and identify a set as well-defined collection of objects	✓			2	13-04-2026 to 14-04-2026
		2	Give examples of set showing its elements		✓		2	15-04-2026 to 16-04-2026
		3	Differentiate between finite and infinite sets		✓		2	17-04-2026 to 18-04-2026
		4	Identify a singleton set and universal set	✓			2	20-04-2026 to 21-04-2026
	(2): Subsets and Super Sets:	5	Explain and represent subsets and supersets through Venn-Diagram		✓		2	22-04-2026 to 23-04-2026
		6	Explain and represent types of subsets (proper and improper subsets) through Venn Diagram		✓		3	24-04-2026 to 27-04-2026

Themes/Topics /Units	Sub-Themes		SLOs	Cognitive Levels			Days	Extreme Summer Zone
5. Introduction to Algebra	(1): Patterns and Number Sequences	1	Recognize the term algebra as an extension of arithmetic with letters, numbers and symbols		✓		2	28-04-2026 to 29-04-2026
		2	Recognize letters that can be replaced to represent numbers	✓			1	30-04-2026
	(2): Algebra	3	Write simple algebraic expressions using different variables			✓	2	02-05-2026 to 04-05-2026
		4	Use values for variables to evaluate the algebraic expression			✓	2	05-05-2026 to 06-05-2026
		5	Solve problems related to addition and subtraction of algebraic expressions.			✓	2	07-05-2026 to 08-05-2026
		6	Simplify given algebraic expressions			✓	2	09-05-2026 to 11-05-2026
		7	Recognize simple patterns from various number sequences and define rules	✓			2	12-05-2026 to 13-05-2026
		8	Real-life problems involving number sequences and patterns		✓		2	14-05-2026 to 15-05-2026
6. Linear Equations:	(1): Algebraic Sentences	1	Recognize algebraic sentences and equations		✓		3	16-05-2026 to -19-05-2026
		2	Explain algebraic sentences and algebraic equations		✓		4	20-05-2026 to 23-05-2026
REVISION							**3**	**25-05-2026 to 30-05-2026**
Total Working Days							**63**	

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
6. Linear Equations		3	Write algebraic sentences for given word sentences		✓		2	01-06-2026 to 02-06-2026
		4	Write word sentences for the given algebraic sentences		✓		3	03-06-2026 to 05-06-2026
	(2): Linear Equations in one variable.	5	Recognize a leaner equation in one variable		✓		1	08-06-2026
	(3): Construction of a linear equation	6	Construct linear in one variable			✓	2	09-06-2026 to 10-06-2026
	(4): Application of linear equations	7	Solve a simple linear equation involving integers, fractions and decimal coefficients			✓	2	11-06-2026 to 12-06-2026
		8	Solve real life situations involving linear equations			✓	2	13-06-2026 to 15-06-2026
7. Geometry	(1): Parallel and Perpendicular Lines	1	Recognize the parallel and perpendicular lines	✓			2	16-06-2026 to 17-06-2026
			Summar vacation					18-06-2026 to 31-08-2026
	(2): Transversal Line	2	Recognize transversal as a line intersecting two parallel lines	✓			1	01-09-2026
	(3): Adjacent Angles	3	Identify an adjacent angle	✓			1	02-09-2026
		4	Calculate adjacent angles			✓	1	03-09-2026
	(4):Complementary and Supplementary Angles	5	Identify complementary and supplementary angles	✓			1	04-09-2026
		6	Calculate complementary, supplementary angles			✓	1	05-09-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
	(5): Vertically Opposite , corresponding and opposite angle	7	Recognize corresponding, alternate and vertically opposite angles		✓		2	07-09-2026 to 08-09-2026
		8	Calculate the unknown angles involving corresponding, alternate and vertically opposite angles			✓	2	09-09-2026 to 10-09-2026
	(6): Symmetry and Line Symmetry	9	Recognize line of symmetry in given geometric shape		✓		1	11-09-2026
	(7): Rotations and Rotational Symmetry	10	Find the point of rotation and order of rotational symmetry		✓		2	12-09-2026 to 14-09-2026
8. Practical Geometry	(1): Line, Line Segment	1	Concept of line and line segment	✓			1	15-09-2026
	(2): Right Bisector of Line Segment	2	Draw a right bisector of a given line segment using compass			✓	1	16-09-2026
	(3): Perpendicular to a given line from point	3	Draw a perpendicular to a given line segment from point on it.			✓	1	17-09-2026
		4	Draw a perpendicular to a given line from a point not lying on the line.			✓	1	18-09-2026
	(4): Bisections of angles using compass	5	Draw Bisector angles using compasses			✓	1	19-09-2026
	(5): Construction of Angles Using Compass	6	Use compasses to construct angles with measures 30, 45, 75, 90, 105 and 120		✓		2	28-09-2026 to 29-09-2026
	(6): Angle Properties of a triangle:	7	Calculate unknown angles of a given triangle			✓	1	30-09-2026
9. Mensuration:	(1): Perimeter of rectangle and Square	1	Calculate the perimeter and area of rectangle			✓	1	01-10-2026
		2	Calculate the perimeter and area of square			✓	1	02-10-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Summer Zone
	(2): Area of Square and Rectangular regions:	3	Calculate the area of square region			✓	1	03-10-2026
		4	Calculate the area of rectangular region			✓	1	05-10-2026
	(3): Real life problems involving perimeters and area of rectangle or Square	5	Solve real life situations involving the perimeter and area of rectangles or squares			✓	1	06-10-2026
	(4): Parallelogram and its area	6	Find the area of parallelogram when the altitude and base are given			✓	1	07-10-2026
	(5): Triangle: Areas and perimeter	7	Find the area of triangle when measures of its altitude and base are given			✓	1	08-10-2026
		8	Find the perimeter of a given triangle with given measures of its sides			✓	1	09-10-2026
	(6): Trapezium: Area and perimeter	9	Find the area of trapezium when altitude and measures of parallel sides are given.			✓	1	12-10-2026
	(7): 3-D Shapes: Cuboids, Cube, Sphere and Hemisphere, Cylinder, Cone,	10	Identify three dimensional geometric shapes such as cube, cuboids, spheres, cylinder, and cone	✓			1	13-10-2026
		11	Find the surface area of cube and cuboids			✓	1	14-10-2026
		12	Find the volume of cube and cuboids			✓	1	15-10-2026
		13	Solve the real life situation involving the volume and surface area of cube and cuboids			✓	1	16-10-2026
10: Data	(1): Data Handling	1	Recognize data and its collection	✓			1	17-10-2026

Themes/Topics /Units	Sub-Themes		SLOs	Cognitive Levels			Days	Extreme Summer Zone
Handling and Probability		2	Distinguish between grouped and ungrouped data		✓		1	19-10-2026
	(2): Mean, Median and Mode	3	Find mean media and mode of ungrouped data			✓	2	20-10-2026 to 21-10-2026
	(3): Multiple Bar Graph:	4	Draw horizontal and vertical multiple bar graph			✓	2	22-10-2026 to 23-10-2026
	(4): Pie Graph:	5	Interpret a pie graph			✓	1	24-10-2026
	(5): Probability	6	Recognize probability as ratio	✓			2	26-10-2026 to 27-10-2026
		7	Differentiate between experimental and theoretical probability		✓		1	28-10-2026
	(6): Outcomes, Sample Space, and Event	8	Explain the concepts of outcomes, sample space and event		✓		1	29-10-2026
	(7): Probability of equally Likely Outcomes	9	Find the probability of equally likely outcomes			✓	2	30-10-2026 to 31-10-2026
REVISION							4	02-11-2026 to 16-11-2026
ANNUAL EXAMINATIONS							21	17-11-2026 to 10-12—2026

Number of Student Learning Outcomes by Cognitive Levels

S#	Theme/Topic	No. of Sub-Topics	SLOs			Total SLOs
			K	U	A	
1	**Factors and Multiples**	6	3	1	11	**15**
2	**Integers**	7	1	3	7	**11**
3	**Ratio ,Rate and Percentage**	2	2	5	4	**11**
4	**Sets**	2	2	4	0	**6**
5	**Introduction to Algebra**	2	2	2	4	**8**
6	**Linear Equations**	4	0	5	3	**8**
7	**Geometry**	7	4	3	3	**10**
8	**Practical Geometry**	6	1	1	5	**7**
9	**Mensuration**	7	1	0	12	**13**
10	**Data Handling and Probability**	7	2	3	4	**9**

Total	**50**	**18**	**27**	**53**	**98**

Determining Marks/Weightage for a Specific Theme/Unit

Sr No	Theme/Unit	No of SLOs in the Unit	Weightage in % = No of SLOs in the Unit / Total No of SLOs of the Subject × 100	Weightage in Marks=Calculated Percentage in Previous Column*Total Marks /100
1	**Factors and Multiples**	15	15/98*100 = 16%	16
2	**Integers**	11	11/98*100 = 11%	11
3	**Ratio ,Rate and Percentage**	11	11/98*100 = 11%	11
4	**Sets**	6	16/98*100 = 6%	6
5	**Introduction to Algebra**	8	8/98*100 = 8%	8
6	**Linear Equations**	8	8/98*100 = 8%	8
7	**Geometry**	10	10/98*100 = 10%	10
8	**Practical Geometry**	7	7/98*100 = 7%	7
9	**Mensuration**	13	13/98*100 = 14%	14
10	**Data Handling and Probability**	9	9/98*100 = 9%	9

Table of Specification for Annual Examination 2026

Sr. No	Theme/Topic	Marks Distribution			Total Marks
		MCQs	CRQs	ERQs	
1	**Factors and Multiples**	3@1 mark=3	5@3 marks=15	2@7 marks=14	**32**
2	**Integers**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
3	**Ratio ,Rate and Percentage**	2@1mark=2	3@3 marks=9	1@7 marks=7	**18**
4	**Sets**	1@1 mark=1	3@3 marks=9		**10**
5	**Introduction to Algebra**	2@1 mark=2	2@3 marks=6		**08**
6	**Linear Equations**	2@1 mark=2	2@3marks=6	1@7 marks=7	**15**
7	**Geometry**	2@1 mark=2	3@3 marks=9	……..	**11**
8	**Practical Geometry**	1@1 mark=1	2@3 marks=6	2@7marks=14	**21**
9	**Mensuration**	3@1 mark=3	4@3 marks=12	2@7marks=14	**29**
10	**Data Handling and Probability**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
Total		**20x1=20**	**30x3=90**	**10x7=70**	**180**

Section-wise Marks Distribution (Including Choices)

S. No	Domain	Question Given	Questions to be Attempted	Marks/ Question	Total Marks including options	Total Marks Without options
1	**MCQs (Section-A)**	20	20	1	20	20
2	**CRQs (Section-B)**	30	15	3	90	45
3	**ERQs (Section-C)**	10	05	07	70	35

Total Marks	**180**	**100**

SCHEME OF STUDIES AND CENTRALIZED SLO BASED SYLLABUS BREAK-UP

GRADE VI – EXTREME WINTER ZONE

SUBJECT: MATHEMATICS **CLASS:6**

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
1. Factors and Multiples: Integers: (25day)		**Students will be able to:**		**K**	**U**	**A**		**Timeline**
	(1):Factors:	**1**	Recognize factors of given numbers	✓			2	01-04-2026 to 02-04-2026
		2	Find all the factors of two digit numbers			✓	2	03-04-2026 to 04-04-2026
	(2): Multiples:	**3**	Recognize multiples of given numbers	✓			1	06-04-2026
		4	Write multiples of given numbers		✓		2	07-04-2026 to 08-04-2026
	(3): Perfect Square:	**5**	Recognize square roots of two digit numbers	✓			1	09-04-2026
		6	Calculate the square root of two digit numbers			✓	2	10-04-2026 to 11-04-2026
		7	Find the square roots of given numbers of upto 3-digits			✓	2	13-04-2026 to 14-04-2026
	(4): Prime Factorization:	**8**	Find the prime factors of given numbers and express its factors in the index notation			✓	2	15-04-2026 to 16-04-2026
	(5): Highest Common Factor (HCF):	**9**	Calculate the HCF of 2-digit and 3-digit numbers using prime factors			✓	2	17-04-2026 to 18-04-2026
		10	Find the HCF by prime factors method			✓	2	20-04-2026 to 21-04-2026
		11	Find the HCF of given numbers by long division method			✓	2	22-04-2026 to 23-04-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
	(6): Least Common Multiples (LCM)	**12**	Find the LCM of given numbers by prime factors method			✓	2	24-04-2026 to 25-04-2026
		13	Find the LCM of given numbers by long division methods.			✓	2	27-04-2026 to 28-04-2026
		14	Find the relation between HCF and LCM			✓	2	29-05-2026 to 30-05-2026
		15	Solve problems using HCF and LCM in real life situations.			✓	2	02-05-2026 to 04-05-2026
2. Integers	**(1): Natural and whole numbers**	**1**	Identify integers	✓			2	05-05-2026 to 06-05-2026
		2	Represent integers on number line		✓		2	07-05-2026 to 08-05-2026
		3	Arrange given integers in ascending and descending orders		✓		1	09-05-2026
	(2): addition and subtraction of integers	**4**	Add, subtract integers			✓	2	11-05-2026 to 12-05-2026
	(3): Division and multiplication of integers	**5**	Multiply and divide integers			✓	2	13-05-2026 to 14-05-2026
	(4): Properties of integers with respect to addition and multiplication:	**6**	Verify commutative property of addition and multiplication of integers.			✓	2	15-05-2026 to 16-05-2026
		7	Verify associative property of addition and multiplication of integers			✓	2	18-05-2026 to 19-05-2026
	(5): Distributive laws	**8**	Verify distributive law of multiplication over addition of integers			✓	2	20-05-2026 to 21-05-2026
		9	Verify distributive law of multiplication over subtraction of integers			✓	2	22-05-2026 to 23-05-2026
	(6): Additive and Multiplicative	**10**	Identify additive and multiplicative inverse of given numbers		✓		1	25-05-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
	inverse							
	(7): BODMAS Rule	**11**	Use BODMAS Rule to solve mathematical operations (addition, subtraction, multiplication, division)			✓	2	26-05-2026-30-05-2026
3. Ratio, Rate and Percentage	**(1): Ratio:**	**1**	Recognize ratios	✓			2	01-06-2026-02-06-2026
		2	Calculate the ratio of numbers/quantities up to 3-digits			✓	2	03-06-2026-04-06-2026
3. Ratio, Rate and Percentage	**1): Ratio:**	**3.**	Reduce a given ratio into its lowest form			✓	2	05-06-2026 to 06-06-2026
	REVISION						8	08-06-2026 to 16-06-2026
	1): Ratio:	**4.**	Explain continuous ratio		✓		**1**	17-06-2026
		5	Express the relation between ratio and fraction		✓		**1**	18-06-2026
		6	Explain rate as comparison of two quantities measured in different units.		✓		**1**	19-06-2026
	(2): Percentage	**7**	Define percentage	✓			2	20-06-2026 to 22-06-2026
		8	Express one quantity as percentage of another		✓		2	23-06-2026 to 24-06-2026
		9	Compare two quantities by percentage		✓		2	27-06-2026 to 29-06-2026
		10	Solve problems related to increase or decrease in quantity by a given percentage.			✓	2	30-06-2026 to 01-07-2026
		11	Solve the problems of ratio, rate and percentage in relation to real life situations.			✓	2	02-07-2026 to 03-07-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
4. Sets:	**(1): Sets**	**1**	Define set and identify a set as well-defined collection of objects	✓			2	04-07-2026 to 06-07-2026
		2	Give examples of set showing its elements		✓		2	07-07-2026 to 08-07-2026
		3	Differentiate between finite and infinite sets		✓		2	09-07-2026 to 10-07-2026
		4	Identify a singleton set and universal set	✓			2	11-07-2026 to 13-07-2026
	(2): Subsets and Super Sets:	**5**	Explain and represent subsets and supersets through Venn-Diagram		✓		2	14-07-2026 to 15-07-2026
		6	Explain and represent types of subsets (proper and improper subsets) through Venn Diagram		✓		2	16-07-2026 to 17-07-2026
5. Introduction to Algebra	**(1): Patterns and Number Sequences**	**1**	Recognize the term algebra as an extension of arithmetic with letters, numbers and symbols		✓		2	18-07-2026 to 20-07-2026
		2	Recognize letters that can be replaced to represent numbers	✓			1	21-07-2026
	(2): Algebra	**3**	Write simple algebraic expressions using different variables			✓	2	22-07-2026 to 23-07-2026
		4	Use values for variables to evaluate the algebraic expression			✓	2	24-07-2026 to 25-07-2026
		5	Solve problems related to addition and subtraction of algebraic expressions.			✓	2	27-07-2026 to 28-07-2026
		6	Simplify given algebraic expressions			✓	2	29-07-2026 to 30-07-2026
		7	Recognize simple patterns from various number sequences and define rules	✓			2	31-07-2026 to 01-08-2026
		8	Real-life problems involving number sequences and patterns		✓		2	03-08-2026 to 04-08-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
6. Linear Equations:	**(1): Algebraic Sentences**	**1**	Recognize algebraic sentences and equations		✓		2	05-08-2026 to 06-08-2026
		2	Explain algebraic sentences and algebraic equations		✓		2	07-08-2026 to 08-08-2026
6. Linear Equations		**3**	Write algebraic sentences for given word sentences		✓		2	10-08-2026 to 11-08-2026
		4	Write word sentences for the given algebraic sentences		✓		2	12-08-2026 to 13-08-2026
	(2): Linear Equations in one variable.	**5**	Recognize a leaner equation in one variable		✓		2	15-08-2026 to 17-08-2026
	(3): Construction of a linear equation	**6**	Construct linear in one variable			✓	2	18-08-2026
	(4): Application of linear equations	**7**	Solve a simple linear equation involving integers, fractions and decimal coefficients			✓	2	19-08-2026 to 20-08-2026
		8	Solve real life situations involving linear equations			✓	2	21-08-2026 to 22-08-2026
7. Geometry	**(1): Parallel and Perpendicular Lines**	**1**	Recognize the parallel and perpendicular lines	✓			2	24-08-2026 to 25-08-2026
	REVISION						10	26-08-2026 to 05-09-2026
	(2): Transversal Line	**2**	Recognize transversal as a line intersecting two parallel lines	✓			1	07-09-2026
	(3): Adjacent Angles	**3**	Identify an adjacent angle	✓			1	08-09-2026
		4	Calculate adjacent angles			✓	1	09-09-2026
	(4):Complementary and Supplementary	**5**	Identify complementary and supplementary angles	✓			1	10-09-2026
		6	Calculate complementary, supplementary			✓	1	11-09-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
	Angles		angles					
		7	Recognize corresponding, alternate and vertically opposite angles		✓		1	12-09-2026
	(5): Vertically Opposite , corresponding and opposite angle	**8**	Calculate the unknown angles involving corresponding, alternate and vertically opposite angles			✓	1	14-09-2026
	(6): Symmetry and Line Symmetry	**9**	Recognize line of symmetry in given geometric shape		✓		1	15-09-2026
	(7): Rotations and Rotational Symmetry	**10**	Find the point of rotation and order of rotational symmetry		✓		1	16-09-2026
8. Practical Geometry	**(1): Line, Line Segment**	**1**	Concept of line and line segment	✓			1	17-09-2026
	(2): Right Bisector of Line Segment	**2**	Draw a right bisector of a given line segment using compass			✓	1	18-09-2026
	(3): Perpendicular to a given line from point	**3**	Draw a perpendicular to a given line segment from point on it.			✓	1	19-09-2026
		4	Draw a perpendicular to a given line from a point not lying on the line.			✓	1	16-09-2026
	(4): Bisections of angles using compass	**5**	Draw Bisector angles using compasses			✓	1	17-09-2026
	(5): Construction of Angles Using Compass	**6**	Use compasses to construct angles with measures 30, 45, 75, 90, 105 and 120		✓		1	18-09-2026
	(6): Angle Properties of a	**7**	Calculate unknown angles of a given triangle			✓	1	19-09-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
	triangle:							
SPORTS GALA							6	21-10-2026 to 26-10-2026
9. Mensuration:	**(1): Perimeter of rectangle and Square**	**1**	Calculate the perimeter and area of rectangle			✓	1	28-09-2026
		2	Calculate the perimeter and area of square			✓	1	29-09-2026
	(2): Area of Square and Rectangular regions:	**3**	Calculate the area of square region			✓	1	30-09-2026
		4	Calculate the area of rectangular region			✓	1	01-10-2026
	(3): Real life problems involving perimeters and area of rectangle or Square	**5**	Solve real life situations involving the perimeter and area of rectangles or squares			✓	1	02-10-2026
	(4): Parallelogram and its area	**6**	Find the area of parallelogram when the altitude and base are given			✓	2	03-10-2026 to 05-10-2026
	(5): Triangle: Areas and perimeter	**7**	Find the area of triangle when measures of its altitude and base are given			✓	2	06-10-2026 to 07-10-2026
		8	Find the perimeter of a given triangle with given measures of its sides			✓	2	08-10-2026 to 09-10-2026
	(6): Trapezium: Area and perimeter	**9**	Find the area of trapezium when altitude and measures of parallel sides are given.			✓	2	10-10-2026 to 12-10-2026
	(7): 3-D Shapes: Cuboids, Cube, Sphere and Hemisphere, Cylinder, Cone,	**10**	Identify three dimensional geometric shapes such as cube, cuboids, spheres, cylinder, and cone	✓			2	13-10-2026 to 14-10-2026
		11	Find the surface area of cube and cuboids			✓	2	15-10-2026 to 16-10-2026
		12	Find the volume of cube and cuboids			✓	2	17-10-2026 to 19-10-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Extreme Winter Zone
		13	Solve the real life situation involving the volume and surface area of cube and cuboids			✓	2	20-10-2026 to 21-10-2026
10: Data Handling and Probability	**(1): Data Handling**	**1**	Recognize data and its collection	✓			2	22-10-2026 to 23-10-2026
		2	Distinguish between grouped and ungrouped data		✓		2	24-10-2026 to 26-10-2026
	(2): Mean, Median and Mode	**3**	Find mean media and mode of ungrouped data			✓	2	27-10-2026 to 28-10-2026
	(3): Multiple Bar Graph:	**4**	Draw horizontal and vertical multiple bar graph			✓	2	29-10-2026 to 30-10-2026
	(4): Pie Graph:	**5**	Interpret a pie graph			✓	2	31-10-2026 to 02-11-2026
	(5): Probability	**6**	Recognize probability as ratio	✓			2	03-11-2026 to 04-11-2026
		7	Differentiate between experimental and theoretical probability		✓		2	05-11-2026 to 06-11-2026
	(6): Outcomes, Sample Space, and Event	**8**	Explain the concepts of outcomes, sample space and event		✓		2	07-11-2026 to 10-11-2026
	(7): Probability of equally Likely Outcomes	**9**	Find the probability of equally likely outcomes			✓	2	11-11-2026 to 12-11-2026
REVISION							4	**13-11-2026 to 17-11-2026**
ANNUAL EXAMINATIONS							21	**18-11-2026 to 11-12--2026**
ASSESSMENT of ANSWER SCRIPTS							3	**12-12-2026 to**

Themes/Topics /Units	Sub-Themes	SLOs	Cognitive Levels	Days	Extreme Winter Zone
					14-12-2026
RESULT ANNOUNCEMENT				1	**15-12-2026**

Number of Student Learning Outcomes by Cognitive Levels

S#	Theme/Topic	No. of Sub-Topics	SLOs			Total SLOs
			K	U	A	
1	**Factors and Multiples**	6	3	1	11	**15**
2	**Integers**	7	1	3	7	**11**
3	**Ratio ,Rate and Percentage**	2	2	5	4	**11**
4	**Sets**	2	2	4	0	**6**
5	**Introduction to Algebra**	2	2	2	4	**8**
6	**Linear Equations**	4	0	5	3	**8**
7	**Geometry**	7	4	3	3	**10**
8	**Practical Geometry**	6	1	1	5	**7**
9	**Mensuration**	7	1	0	12	**13**
10	**Data Handling and Probability**	7	2	3	4	**9**
Total		**50**	**18**	**27**	**53**	**98**

Determining Marks/Weightage for a Specific Theme/Unit

Sr No	Theme/Unit	No of SLOs in the Unit	Weightage in % = No of SLOs in the Unit / Total No of SLOs of the Subject × 100	Weightage in Marks=Calculated Percentage in Previous Column*Total Marks /100
1	**Factors and Multiples**	15	15/98*100 = 16%	16
2	**Integers**	11	11/98*100 = 11%	11
3	**Ratio ,Rate and Percentage**	11	11/98*100 = 11%	11
4	**Sets**	6	16/98*100 = 6%	6
5	**Introduction to Algebra**	8	8/98*100 = 8%	8
6	**Linear Equations**	8	8/98*100 = 8%	8
7	**Geometry**	10	10/98*100 = 10%	10
8	**Practical Geometry**	7	7/98*100 = 7%	7
9	**Mensuration**	13	13/98*100 = 14%	14
10	**Data Handling and Probability**	9	9/98*100 = 9%	9

Note: The table mentioned above should be used to determine the weightage/marks of a specific theme/unit. However, subject experts should also consider the relevance and significance of the topic when finalizing the weightage/marks.

Sr. No	Theme/Topic	Marks Distribution			Total Marks
		MCQs	CRQs	ERQs	
1	**Factors and Multiples**	3@1 mark=3	5@3 marks=15	2@7 marks=14	**32**
2	**Integers**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
3	**Ratio ,Rate and Percentage**	2@1mark=2	3@3 marks=9	1@7 marks=7	**18**
4	**Sets**	1@1 mark=1	3@3 marks=9		**10**
5	**Introduction to Algebra**	2@1 mark=2	2@3 marks=6		**08**
6	**Linear Equations**	2@1 mark=2	2@3marks=6	1@7 marks=7	**15**
7	**Geometry**	2@1 mark=2	3@3 marks=9	……..	**11**
8	**Practical Geometry**	1@1 mark=1	2@3 marks=6	2@7marks=14	**21**
9	**Mensuration**	3@1 mark=3	4@3 marks=12	2@7marks=14	**29**
10	**Data Handling and Probability**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
Total		**20x1=20**	**30x3=90**	**10x7=70**	**180**

Section-wise Marks Distribution (Including Choices)

S. No	Domain	Question Given	Questions to be Attempted	Marks/ Question	Total Marks including options	Total Marks Without options
1	**MCQs (Section-A)**	20	20	1	20	20
2	**CRQs (Section-B)**	30	15	3	90	45
3	**ERQs (Section-C)**	10	05	07	70	35
Total Marks					**180**	**100**

SCHEME OF STUDIES AND CENTRALIZED SLO BASED SYLLABUS BREAK-UP
GRADE VI –SUMMER ZONE

Subject: Mathematics **Class:6**

Themes/Topics /Units	Sub-Themes		SLOs	Cognitive Levels			Days	Summer Zone
1.Factors and Multiples: Integers: (25day)		Students will be able to:		**K**	**U**	**A**		Timeline
	(1):Factors:	1	Recognize factors of given numbers	✓			2	06-02-2026 to 07-02-2026
		2	Find all the factors of two digit numbers			✓	2	09-02-2026 to 10-02-2026
	(2): Multiples:	3	Recognize multiples of given numbers	✓			1	11-02-2026
		4	Write multiples of given numbers		✓		2	12-02-2026 to 13-02-2026
	(3): Perfect Square:	5	Recognize square roots of two digit numbers	✓			1	14-02-2026
		6	Calculate the square root of two digit numbers			✓	2	16-02-2026 to 17-02-2026
		7	Find the square roots of given numbers of upto 3-digits			✓	2	18-02-2026 to 19-02-2026
	(4): Prime Factorization:	8	Find the prime factors of given numbers and express its factors in the index notation			✓	2	20-02-2026 to 21-02-2026
	(5): Highest Common Factor (HCF):	9	Calculate the HCF of 2-digit and 3-digit numbers using prime factors			✓	2	23-02-2026 to 24-02-2026
		10	Find the HCF by prime factors method			✓	2	25-02-2026 to 26-02-2026
		11	Find the HCF of given numbers by long division method			✓	2	27-02-2026 to 28-02-2026

Themes/Topics /Units	Sub-Themes		SLOs	Cognitive Levels			Days	Summer Zone
	(6): Least Common Multiples (LCM)	12	Find the LCM of given numbers by prime factors method			✓	2	02-03-2026 to 03-03-2026
		13	Find the LCM of given numbers by long division methods			✓	2	04-03-2026 to 05-03-2026
		14	Find the relation between HCF and LCM			✓	2	06-03-2026 to 07-03-2026
		15	Solve problems using HCF and LCM in real life situations.			✓	2	09-03-2026 to 10-03-2026
2.Integers	(1): Natural and whole numbers	1	Identify integers	✓			2	11-03-2026 to 12-03-2026
		2	Represent integers on number line		✓		2	13-03-2026 to 14-03-2026
		3	Arrange given integers in ascending and descending orders		✓		1	16-03-2026
	(2): addition and subtraction of integers	4	Add, subtract integers			✓	2	17-03-2026 to 18-03-2026
	(3): Division and multiplication of integers	5	Multiply and divide integers			✓	2	19-03--2026 to 20-03-2026
	(4): Properties of integers with respect to addition and multiplication:	6	Verify commutative property of addition and multiplication of integers.			✓	2	24-03-2026 to 25-03-2026
		7	Verify associative property of addition and multiplication of integers			✓	2	26-03-2026 to 27-03-2026
	(5): Distributive laws	8	Verify distributive law of multiplication over addition of integers			✓	2	28-03-2026 to 30-03-2026
		9	Verify distributive law of multiplication over subtraction of integers			✓	2	31-03-2026 to 01-04-2026
	(6): Additive and Multiplicative inverse	10	Identify additive and multiplicative inverse of given numbers		✓		1	02-04-2026
	(7): BODMAS Rule	11	Use BODMAS Rule to solve mathematical operations (addition, subtraction, multiplication, division)			✓	1	03-04-2026

Themes/Topics /Units	Sub-Themes		SLOs	Cognitive Levels			Days	Summer Zone
3.Ratio, Rate and Percentage	(1): Ratio:	1	Recognize ratios	✓			1	04-04-2026
		2	Calculate the ratio of numbers/quantities up to 3-digits			✓	2	05-04-2026 to 06-04-2026
3.Ratio, Rate and Percentage	1): Ratio:	3.	Reduce a given ratio into its lowest form			✓	2	07-04-2026 to 09-04-2026
		4.	Explain continuous ratio		✓		1	10-04-2026
		5	Express the relation between ratio and fraction		✓		1	11-04-2026
		6	Explain rate as comparison of two quantities measured in different units.		✓		1	12-04-2026
REVISION							9	13-04-2026 to 25-04-2026
	(2): Percentage	7	Define percentage	✓			2	26-04-2026 to 27-04-2026
		8	Express one quantity as percentage of another		✓		2	28-04-2026 to 30-04-2026
		9	Compare two quantities by percentage		✓		2	02-05-2026 to 04-05-2026
		10	Solve problems related to increase or decrease in a			✓	2	05-05-2026 to 06-05-2026
		11	Solve the problems of ratio, rate and percentage in relation to real life situations.			✓	2	07-05-2026 to 08-05-2026
4. Sets:	(1): Sets	1	Define set and identify a set as well-defined collection of objects	✓			2	09-05-2026 to 11-05-2026
		2	Give examples of set showing its elements		✓		2	12-05-2026 to 13-05-2026
		3	Differentiate between finite and infinite sets		✓		2	14-05-2026 to 15-05-2026
		4	Identify a singleton set and universal set	✓			2	16-05-2026 to 18-05-2026

	(2): Subsets and Super Sets:	5	Explain and represent subsets and supersets through Venn-Diagram		✓		2	19-05-2026 to 20-05-2026
		6	Explain and represent types of subsets (proper and improper subsets) through Venn Diagram		✓		2	21-05-2026 to 22-05-2026
5.Introduction to Algebra	(1): Patterns and Number Sequences	1	Recognize the term algebra as an extension of arithmetic with letters, numbers and symbols		✓		2	23-05-2026 to 25-05-2026
		2	Recognize letters that can be replaced to represent numbers	✓			1	26-05-2026
	(2): Algebra	3	Write simple algebraic expressions using different variables			✓	2	30-05-2026 to 01-06-2026
		4	Use values for variables to evaluate the algebraic expression			✓	2	02-06-2026 to 03-06-2026
		5	Solve problems related to addition and subtraction of algebraic expressions.			✓	2	04-06-2026 to 05-06-2026
		6	Simplify given algebraic expressions			✓	2	06-06-2026 to 08-06-2026
		7	Recognize simple patterns from various number sequences and define rules	✓			2	09-06-2026 to 10-06-2026
		8	Real-life problems involving number sequences and patterns		✓		2	11-06-2026 to 12-06-2026
6.Linear Equations:	(1): Algebraic Sentences	1	Recognize algebraic sentences and equations		✓		2	13-06-2026 to 15-06-2026
		2	Explain algebraic sentences and algebraic equations		✓		2	16-06-2026 to 17-06-2026
6.Linear Equations		3	Write algebraic sentences for given word sentences		✓		2	18-06-2026 to 19-06-2026
		4	Write word sentences for the given algebraic sentences		✓		3	20-06-2026 to 22-06-2026
	(2): Linear Equations in one variable.	5	Recognize a leaner equation in one variable		✓		1	23-06-2026 to 24-06-2026
	(3): Construction of a linear equation	6	Construct linear in one variable			✓	2	27-06-2026 to 29-06-2026
	(4): Application of linear equations	7	Solve a simple linear equation involving integers, fractions and decimal coefficients			✓	2	30-06-2026 to 13-08-2026
		8	Solve real life situations involving linear equations			✓	2	15-08-2026 to 17-

								08-2026
7.Geometry	(1): Parallel and Perpendicular Lines	1	Recognize the parallel and perpendicular lines	✓			2	18-08-2026 to 19-08-2026
	(2): Transversal Line	2	Recognize transversal as a line intersecting two parallel lines	✓			1	20-08-2026
	(3): Adjacent Angles	3	Identify an adjacent angle	✓			1	21-08-2026
		4	Calculate adjacent angles			✓	1	22-08-2026
	(4):Complementary and Supplementary Angles	5	Identify complementary and supplementary angles	✓			1	24-08-2026
		6	Calculate complementary, supplementary angles			✓	1	25-08-2026
		7	Recognize corresponding, alternate and vertically opposite angles		✓		2	25-08-2026 to 27-08-2026
	(5): Vertically Opposite , corresponding and opposite angle	8	Calculate the unknown angles involving corresponding, alternate and vertically opposite angles			✓	2	28-08-2026 to 29-08-2026
	(6): Symmetry and Line Symmetry	9	Recognize line of symmetry in given geometric shape		✓		1	31-08-2026
	(7): Rotations and Rotational Symmetry	10	Find the point of rotation and order of rotational symmetry		✓		2	01-09-2026 to 02-09-2026
8.Practical Geometry	(1): Line, Line Segment	1	Concept of line and line segment	✓			1	03-09-2026
	(2): Right Bisector of Line Segment	2	Draw a right bisector of a given line segment using compass			✓	1	04-09-2026
	(3): Perpendicular to a given line from point	3	Draw a perpendicular to a given line segment from point on it.			✓	1	05-09-2026
		4	Draw a perpendicular to a given line from a point not lying on the line.			✓	1	07-09-2026

	(4): Bisections of angles using compass	5	Draw Bisector angles using compasses			✓	2	08-09-2026 to 09-09-2026

	(5): Construction of Angles Using Compass	6	Use compasses to construct angles with measures 30, 45, 75, 90, 105 and 120		✓		2	10-09-2026 to 11-09-2026
	(6): Angle Properties of a triangle:	7	Calculate unknown angles of a given triangle			✓	2	12-09-2026 to 14-09-2026
9.Mensuration:	(1): Perimeter of rectangle and Square	1	Calculate the perimeter and area of rectangle			✓	2	15-09-2026 to 16-09-2026
		2	Calculate the perimeter and area of square			✓	2	17-09-2026 to 18-09-2026
	(2): Area of Square and Rectangular regions:	3	Calculate the area of square region			✓	2	19-09-2026 to 28-09-2026
		4	Calculate the area of rectangular region			✓	2	29-09-2026 to 30-09-2026
	(3): Real life problems involving perimeters and area of rectangle or Square	5	Solve real life situations involving the perimeter and area of rectangles or squares			✓	2	01-10-2026 to 02-10-2026
	(4): Parallelogram and its area	6	Find the area of parallelogram when the altitude and base are given			✓	2	03-10-2026 to 05-10-2026
	(5): Triangle: Areas and perimeter	7	Find the area of triangle when measures of its altitude and base are given			✓	2	06-10-2026 to 07-10-2026
		8	Find the perimeter of a given triangle with given measures of its sides			✓	2	08-10-2026 to 09-10-2026
	(6): Trapezium: Area and perimeter	9	Find the area of trapezium when altitude and measures of parallel sides are given.			✓	2	10-10-2026 to 12-10-2026
	(7): 3-D Shapes: Cuboids, Cube, Sphere and Hemisphere, Cylinder, Cone,	10	Identify three dimensional geometric shapes such as cube, cuboids, spheres, cylinder, and cone	✓			2	13-10-2026 to 14-10-2026
		11	Find the surface area of cube and cuboids			✓	2	15-10-2026 to 18-10-2026
		12	Find the volume of cube and cuboids			✓	2	17-10-2026 to 19-10-2026
		SPORTS GALA					6	20-10-2026 to 21-10-2026
		13	Solve the real life situation involving the volume and surface area of cube and cuboids			✓	2	22-10-2026 to 23-10-2026
10: Data	(1): Data Handling	1	Recognize data and its collection	✓			2	24-10-2026 to

Handling and Probability								26-10-2026
		2	Distinguish between grouped and ungrouped data		✓		2	27-10-2026 to 28-10-2026
	(2): Mean, Median and Mode	3	Find mean media and mode of ungrouped data			✓	2	29-10-2026 to 30-10-2026
	(3): Multiple Bar Graph:	4	Draw horizontal and vertical multiple bar graph			✓	2	31-10-2026 to 02-11-2026
	(4): Pie Graph:	5	Interpret a pie graph			✓	2	03-11-2026 to 04-11-2026
	(5): Probability	6	Recognize probability as ratio	✓			2	05-11-2026 to 06-11-2026
		7	Differentiate between experimental and theoretical probability		✓		2	07-11-2026 to 10-11-2026
	(6): Outcomes, Sample Space, and Event	8	Explain the concepts of outcomes, sample space and event		✓		2	11-11-2026 to 12-11-2026
	(7): Probability of equally Likely Outcomes	9	Find the probability of equally likely outcomes			✓	2	13-11-2026 to 14-11-2026
REVISION							2	15-11-2026 to 16-11-2026
ANNUAL EXAMINATIONS							21	17-11-2026 to 10-12--2026
ASSESSMENT of ANSWER SCRIPTS/RESULT							07	11-12-2026 to 15-12-2026

Number of Student Learning Outcomes by Cognitive Levels

S#	Theme/Topic	No. of Sub-Topics	SLOs			Total SLOs
			K	U	A	
1	Factors and Multiples	6	3	1	11	15
2	Integers	7	1	3	7	11
3	Ratio ,Rate and Percentage	2	2	5	4	11
4	Sets	2	2	4	0	6
5	Introduction to Algebra	2	2	2	4	8
6	Linear Equations	4	0	5	3	8
7	Geometry	7	4	3	3	10
8	Practical Geometry	6	1	1	5	7
9	Mensuration	7	1	0	12	13
10	Data Handling and Probability	7	2	3	4	9
Total		50	18	27	53	98

Determining Marks/Weightage for a Specific Theme/Unit

Sr No	Theme/Unit	No of SLOs in the Unit	Weightage in % = No of SLOs in the Unit / Total No of SLOs of the Subject × 100	Weightage in Marks=Calculated Percentage in Previous Column*Total Marks /100
1	Factors and Multiples	15	15/98*100 = 16%	16
2	Integers	11	11/98*100 = 11%	11
3	Ratio ,Rate and Percentage	11	11/98*100 = 11%	11
4	Sets	6	16/98*100 = 6%	6
5	Introduction to Algebra	8	8/98*100 = 8%	8
6	Linear Equations	8	8/98*100 = 8%	8
7	Geometry	10	10/98*100 = 10%	10
8	Practical Geometry	7	7/98*100 = 7%	7
9	Mensuration	13	13/98*100 = 14%	14
10	Data Handling and Probability	9	9/98*100 = 9%	9

Note: The table mentioned above should be used to determine the weightage/marks of a specific theme/unit. However, subject experts should also consider the relevance and significance of the topic when finalizing the weightage/marks

Sr. No	Theme/Topic	Marks Distribution			Total Marks
		MCQs	CRQs	ERQs	
1	Factors and Multiples	3@1 mark=3	5@3 marks=15	2@7 marks=14	32
2	Integers	2@1 mark=2	3@3 marks=9	1@7 marks=7	18
3	Ratio ,Rate and Percentage	2@1mark=2	3@3 marks=9	1@7 marks=7	18
4	Sets	1@1 mark=1	3@3 marks=9		10
5	Introduction to Algebra	2@1 mark=2	2@3 marks=6		08
6	Linear Equations	2@1 mark=2	2@3marks=6	1@7 marks=7	15
7	Geometry	2@1 mark=2	3@3 marks=9	……..	11
8	Practical Geometry	1@1 mark=1	2@3 marks=6	2@7marks=14	21
9	Mensuration	3@1 mark=3	4@3 marks=12	2@7marks=14	29
10	Data Handling and Probability	2@1 mark=2	3@3 marks=9	1@7 marks=7	18
Total		20x1=20	30x3=90	10x7=70	180

Section-wise Marks Distribution (Including Choices)

S. No	Domain	Question Given	Questions to be Attempted	Marks/ Question	Total Marks including options	Total Marks Without options
1	MCQs (Section-A)	20	20	1	20	20
2	CRQs (Section-B)	30	15	3	90	45
3	ERQs (Section-C)	10	05	07	70	35
Total Marks					180	100

SCHEME OF STUDIES AND CENTRALIZED SLO BASED SYLLABUS BREAK-UP

GRADE VI – WINTER ZONE

Subject: Mathematics Class: 6

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
1. Factors and Multiples: Integers: (25day)		**Students will be able to:**						**Timeline**
	(1):Factors:	**1**	Recognize factors of given numbers	✓			**2**	02-03-2026 to 03-03-2026
		2	Find all the factors of two-digit numbers			✓	**2**	04-03-2026 to 05-03-2026
	(2): Multiples:	**3**	Recognize multiples of given numbers	✓			**2**	06-03-2026 to 07-03-2026
		4	Write multiples of given numbers		✓		**3**	09-03-2026 to 11-03-2026
	(3): Perfect Square:	**5**	Recognize square roots of two-digit numbers	✓			**1**	12-03-2026
		6	Calculate the square root of two-digit numbers			✓	**2**	13-03-2026 to 14-03-2026
		7	Find the square roots of given numbers of upto 3-digits			✓	**2**	16-03-2026 to 17-03-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	(4): Prime Factorization:	**8**	Find the prime factors of given numbers and express its factors in the index notation			✓	**2**	18-03-2026 to 19-03-2026
	(5): Highest Common Factor (HCF):	**9**	Calculate the HCF of 2-digit and 3-digit numbers using prime factors			✓	**2**	20-03-2026 to 24-03-2026
		10	Find the HCF by prime factors method			✓	**2**	25-03-2026 to 26-03-2026
		11	Find the HCF of given numbers by long division method			✓	**2**	27-03-2026 to 28-03-2026
	(6): Least Common Multiples (LCM)	**12**	Find the LCM of given numbers by prime factors method			✓	**2**	30-03-2026 to 31-03-2026
		13	Find the LCM of given numbers by long division methods			✓	**2**	01-04-2026 to 02-04-2026
		14	Find the relation between HCF and LCM			✓	**2**	03-04-2026 to 04-04-2026
		15	Solve problems using HCF and LCM in real life situations.			✓	**2**	06-04-2026 to 07-04-2026
2. Integers	(1): Natural and whole numbers	**1**	Identify integers	✓			**2**	08-04-2026 to

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
								09-04-2026
		2	Represent integers on number line		✓		**2**	10-04-2026 to 11-04-2026
		3	Arrange given integers in ascending and descending orders		✓		**1**	13-04-2026
	(2): addition and subtraction of integers	**4**	Add, subtract integers			✓	**2**	14-04-2026 to 15-04-2026
	(3): Division and multiplication of integers	**5**	Multiply and divide integers			✓	**2**	16-04-2026 to 17-04-2026
	(4): Properties of integers with respect to addition and multiplication:	**6**	Verify commutative property of addition and multiplication of integers.			✓	**2**	18-04-2026 to 20-04-2026
		7	Verify associative property of addition and multiplication of integers			✓	**2**	21-04-2026 to 22-04-2026
	(5): Distributive laws	**8**	Verify distributive law of multiplication over addition of integers			✓	**2**	23-04-2026 to 24-04-2026
		9	Verify distributive law of multiplication over subtraction of integers			✓	**2**	25-04-2026 to 27-04-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	(6): Additive and Multiplicative inverse	**10**	Identify additive and multiplicative inverse of given numbers		✓		**1**	28-04-2026
	(7): BODMAS Rule	**11**	Use BODMAS Rule to solve mathematical operations (addition, subtraction, multiplication, division)			✓	**1**	29-04-2026
3. Ratio, Rate and Percentage	(1): Ratio:	**1**	Recognize ratios	✓			**1**	30-04-2026
		2	Calculate the ratio of numbers/quantities up to 3-digits.			✓	**1**	02-05-2026
3. Ratio, Rate and Percentage	1): Ratio:	**3.**	Reduce a given ratio into its lowest form			✓	**2**	04-05-2026 to 05-05-2026
		4.	Explain continuous ratio		✓		**2**	06-05-2026 to 07-05-2026
		5	Express the relation between ratio and fraction		✓		**2**	08-05-2026 to 09-05-2026
		6	Explain rate as comparison of two quantities measured in different units.		✓		**2**	11-05-2026 12-05-2026
REVISION							**8**	13-05-2026 to 21-05-

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
								2026
	(2): Percentage	**7**	Define percentage	✓			**2**	22-05-2026 to 23-05-2026
		8	Express one quantity as percentage of another		✓		**2**	25-05-2026 to 26-05-2026
		9	Compare two quantities by percentage		✓		**2**	30-05-2026 to 01-06-2026
		10	Solve problems related to increase or decrease in a quantity by a given percentage.			✓	**2**	02-06-2026 to 03-06-2026
		11	Solve the problems of ratio, rate and percentage in relation to real life situations.			✓	**2**	04-06-2026 to 05-06-2026
4. Sets:	(1): Sets	**1**	Define set and identify a set as well-defined collection of objects	✓			**2**	06-06-2026 to 08-06-2026
		2	Give examples of set showing its elements		✓		**2**	09-06-2026 to 10-06-2026
		3	Differentiate between finite and infinite sets		✓		**2**	11-06-2026 to 12-06-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
		4	Identify a singleton set and universal set	✓			**2**	13-06-2026 to 15-06-2026
	(2): Subsets and Super Sets:	**5**	Explain and represent subsets and supersets through Venn-Diagram		✓		**2**	16-06-2026 to 17-06-2026
		6	Explain and represent types of subsets (proper and improper subsets) through Venn Diagram		✓		**2**	18-06-2026 to 19-06-2026
5. Introduction to Algebra	(1): Patterns and Number Sequences	**1**	Recognize the term algebra as an extension of arithmetic with letters, numbers and symbols		✓		**2**	20-06-2026 to 22-06-2026
		2	Recognize letters that can be replaced to represent numbers	✓			**1**	23-06-2026
	(2): Algebra	**3**	Write simple algebraic expressions using different variables			✓	2	24-06-2026 and 27-06-2026
		4	Use values for variables to evaluate the algebraic expression			✓	2	29-06-2026 to 30-06-2026
		5	Solve problems related to addition and subtraction of algebraic expressions.			✓	2	01-07-2026 to 02-07-2026
		6	Simplify given algebraic expressions			✓	2	03-07-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
								to 04-07-2026
		7	Recognize simple patterns from various number sequences and define rules	✓			2	06-07-2026 to 07-07-2026
		8	Real-life problems involving number sequences and patterns		✓		2	08-07-2026 to 09-07-2026
6. Linear Equations:	**(**1): Algebraic Sentences	**1**	Recognize algebraic sentences and equations		✓		2	10-07-2026 to 11-07-2026
		2	Explain algebraic sentences and algebraic equations		✓		**2**	13-07-2026 to 14-07-2026
6. Linear Equations		**3**	Write algebraic sentences for given word sentences		✓		**2**	15-07-2026 to 16-07-2026
		4	Write word sentences for the given algebraic sentences		✓		**3**	17-07-2026 to 18-07-2026
	(2): Linear Equations in one variable.	**5**	Recognize a leaner equation in one variable		✓		**1**	20-07-2026
	SUMMER VACATIONS						**20**	21-07-2026 to 10-08-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	(3): Construction of a linear equation	**6**	Construct linear in one variable			✓	**2**	11-08-2026 to 12-08-2026
	(4): Application of linear equations	**7**	Solve a simple linear equation involving integers, fractions and decimal coefficients			✓	**2**	13-08-2026 to 15-08-2026
		8	Solve real life situations involving linear equations			✓	**2**	17-08-2026 to 18-08-2026
7. Geometry	**(**1): Parallel and Perpendicular Lines	**1**	Recognize the parallel and perpendicular lines	✓			**2**	19-08-2026 to 20-08-2026
	REVISION						**10**	21-08-2026 to 01-09-2026
	(2): Transversal Line	**2**	Recognize transversal as a line intersecting two parallel lines	✓			**1**	02-09-2026
	(3): Adjacent Angles	**3**	Identify an adjacent angle	✓			**1**	03-09-2026
		4	Calculate adjacent angles			✓	**1**	04-09-2026
	(4):Complementary and Supplementary Angles	**5**	Identify complementary and supplementary angles	✓			**1**	05-09-2026
		6	Calculate complementary, supplementary angles			✓	**1**	07-09-2026
		7	Recognize corresponding, alternate and vertically opposite angles		✓		**1**	08-09-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	(5): Vertically Opposite , corresponding and opposite angle	**8**	Calculate the unknown angles involving corresponding, alternate and vertically opposite angles			✓	**1**	09-09-2026
	(6): Symmetry and Line Symmetry	**9**	Recognize line of symmetry in given geometric shape		✓		**1**	10-09-2026
	(7): Rotations and Rotational Symmetry	**10**	Find the point of rotation and order of rotational symmetry		✓		**1**	11-09-2026
8. Practical Geometry	(1): Line, Line Segment	**1**	Concept of line and line segment	✓			**1**	12-09-2026
	(2): Right Bisector of Line Segment	**2**	Draw a right bisector of a given line segment using compass			✓	**1**	14-09-2026
	(3): Perpendicular to a given line from point	**3**	Draw a perpendicular to a given line segment from point on it.			✓	**1**	15-09-2026
		4	Draw a perpendicular to a given line from a point not lying on the line.			✓	**1**	16-09-2026
	(4): Bisections of angles using compass	**5**	Draw Bisector angles using compasses			✓	1	17-09-2026
	(5): Construction of Angles Using Compass	**6**	Use compasses to construct angles with measures 30, 45, 75, 90, 105 and 120		✓		1	18-09-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	(6): Angle Properties of a triangle:	**7**	Calculate unknown angles of a given triangle			✓	1	19-09-2026
9. Mensuration:	(1): Perimeter of rectangle and Square	**1**	Calculate the perimeter and area of rectangle			✓	1	28-09-2026
		2	Calculate the perimeter and area of square			✓	1	29-09-2026
	(2): Area of Square and Rectangular regions:	**3**	Calculate the area of square region			✓	1	30-09-2026
		4	Calculate the area of rectangular region			✓	1	01-10-2026
	(3): Real life problems involving perimeters and area of rectangle or Square	**5**	Solve real life situations involving the perimeter and area of rectangles or squares			✓	1	02-10-2026
	(4): Parallelogram and its area	**6**	Find the area of parallelogram when the altitude and base are given			✓	1	03-10-2026
	(5): Triangle: Areas and perimeter	**7**	Find the area of triangle when measures of its altitude and base are given			✓	1	05-10-2026
		8	Find the perimeter of a given triangle with given measures of its sides			✓	1	06-10-2026
	(6): Trapezium: Area and perimeter	**9**	Find the area of trapezium when altitude and measures of parallel sides are given.			✓	2	07-10-2026 to 08-10-2026
	(7): 3-D Shapes: Cuboids, Cube,	**10**	Identify three dimensional geometric shapes such as cube, cuboids, spheres, cylinder, and cone	✓			2	09-10-2026 to 10-10-2026

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
	Sphere and Hemisphere, Cylinder, Cone,	11	Find the surface area of cube and cuboids			✓	2	12-10-2026 to 13-10-2026
		12	Find the volume of cube and cuboids			✓	2	14-10-2026 to 15-10-2026
		SPORTS GALA					6	16-10-2026 to 17-10-2026
		13	Solve the real life situation involving the volume and surface area of cube and cuboids			✓	2	19-10-2026 to 20-10-2026
10: Data Handling and Probability	(1): Data Handling	**1**	Recognize data and its collection	✓			2	21-10-2026 to 22-10-2026
		2	Distinguish between grouped and ungrouped data		✓		2	23-10-2026 to 24-10-2026
	(2): Mean, Median and Mode	**3**	Find mean media and mode of ungrouped data			✓	2	26-10-2026 to 27-10-2026
	(3): Multiple Bar Graph:	**4**	Draw horizontal and vertical multiple bar graph			✓	2	28-10-2026 to 29-10-2026
	(4): Pie Graph:	**5**	Interpret a pie graph			✓	2	30-10-2026 to -31-2026
	(5): Probability	**6**	Recognize probability as ratio	✓			2	02-11-2026 to 03-11-

Themes/Topics /Units	Sub-Themes	SLOs		Cognitive Levels			Days	Winter Zone
				K	U	A		
								2026
		7	Differentiate between experimental and theoretical probability		✓		2	04-11-2026 to 05-11-2026
	(6): Outcomes, Sample Space, and Event	**8**	Explain the concepts of outcomes, sample space and event		✓		2	06-11-2026 to 07-11-2026
	(7): Probability of equally Likely Outcomes	**9**	Find the probability of equally likely outcomes			✓	2	10-11-2026 to 11-11-2026
REVISION							4	12-11-2026 to 16-11-2026
ANNUAL EXAMINATIONS							21	17-11-2026 to 10-12-2026
ASSESSMENT of ANSWER SCRIPTS							3	11-12-2026 to 13-12-2026
RESULT ANNOUNCEMENT							1	15-12-2026

Number of Student Learning Outcomes by Cognitive Levels

S#	Theme/Topic	No. of Sub-Topics	SLOs			Total SLOs
			K	U	A	
1	**Factors and Multiples**	6	3	1	11	**15**
2	**Integers**	7	1	3	7	**11**
3	**Ratio ,Rate and Percentage**	2	2	5	4	**11**

4	**Sets**	2	2	4	0	**6**
5	**Introduction to Algebra**	2	2	2	4	**8**
6	**Linear Equations**	4	0	5	3	**8**
7	**Geometry**	7	4	3	3	**10**
8	**Practical Geometry**	6	1	1	5	**7**
9	**Mensuration**	7	1	0	12	**13**
10	**Data Handling and Probability**	7	2	3	4	**9**
Total		**50**	**18**	**27**	**53**	**98**

Determining Marks/Weightage for a Specific Theme/Unit

Sr No	Theme/Unit	No of SLOs in the Unit	Weightage in % = No of SLOs in the Unit / Total No of SLOs of the Subject × 100	Weightage in Marks=Calculated Percentage in Previous Column*Total Marks /100
1	**Factors and Multiples**	**15**	**15/98*100 = 16%**	**16**
2	**Integers**	**11**	**11/98*100 = 11%**	**11**
3	**Ratio ,Rate and Percentage**	**11**	**11/98*100 = 11%**	**11**
4	**Sets**	**6**	**16/98*100 = 6%**	**6**
5	**Introduction to Algebra**	**8**	**8/98*100 = 8%**	**8**
6	**Linear Equations**	**8**	**8/98*100 = 8%**	**8**
7	**Geometry**	**10**	**10/98*100 = 10%**	**10**
8	**Practical Geometry**	**7**	**7/98*100 = 7%**	**7**
9	**Mensuration**	**13**	**13/98*100 = 14%**	**14**
10	**Data Handling and Probability**	**9**	**9/98*100 = 9%**	**9**

Note: The table mentioned above should be used to determine the weightage/marks of a specific theme/unit. However, subject experts should also consider the relevance and significance of the topic when finalizing the weightage/marks

Sr. No	Theme/Topic	Marks Distribution			Total Marks
		MCQs	CRQs	ERQs	
1	**Factors and Multiples**	3@1 mark=3	5@3 marks=15	2@7 marks=14	**32**
2	**Integers**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
3	**Ratio ,Rate and Percentage**	2@1mark=2	3@3 marks=9	1@7 marks=7	**18**
4	**Sets**	1@1 mark=1	3@3 marks=9	-	**10**
5	**Introduction to Algebra**	2@1 mark=2	2@3 marks=6	-	**08**
6	**Linear Equations**	2@1 mark=2	2@3marks=6	1@7 marks=7	**15**
7	**Geometry**	2@1 mark=2	3@3 marks=9	-	**11**
8	**Practical Geometry**	1@1 mark=1	2@3 marks=6	2@7marks=14	**21**
9	**Mensuration**	3@1 mark=3	4@3 marks=12	2@7marks=14	**29**
10	**Data Handling and Probability**	2@1 mark=2	3@3 marks=9	1@7 marks=7	**18**
Total		**20x1=20**	**30x3=90**	**10x7=70**	**180**

Section-wise Marks Distribution (Including Choices)

S. No	Domain	Question Given	Questions to be Attempted	Marks/ Question	Total Marks including options	Total Marks Without options
1	**MCQs (Section-A)**	20	20	1	20	20
2	**CRQs (Section-B)**	30	15	3	90	45
3	**ERQs (Section-C)**	10	05	07	70	35
Total Marks					**180**	**100**