SANT NANDLAL SMRITI VIDYA MANDIR, GHATSILA

YEARLY SYLLABUS OF GANITA PRAKASH (MATHEMATICS)

SESSION : 2026-2027

STD – IX

MONTH	NO. OF CLASSES	TOPIC TO BE TAUGHT	ACTIVITY	LEARNING OUTCOME	VALUES & SKILLS IMPARTED	ASSESSMENT
APRIL		**Number System**	• Number line representation • Square root spiral construction • Decimal expansion activities	• Understand rational & irrational numbers • Represent numbers on number line • Prove irrationality (√2, √3)	• Logical reasoning • Accuracy • Analytical thinking	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
APRIL		**Polynomials**	• Algebraic expression formation • Graph plotting (y = ax + b) • Pattern identification	• Identify degree & coefficients • Understand linear relationships • Graph linear equations	• Problem-solving • Pattern recognition • Computational thinking	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
MAY		**Sequences & Progressions**	• AP/GP pattern activity • Tower of Hanoi puzzle • Graphical representation	• Identify AP & GP • Find nth term • Apply in real-life contexts	• Logical thinking • Strategy building • Analytical skills	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
JUNE		**Algebraic Identities**	• Algebra tiles activity • Geometrical proof of identities • Factorisation exercises	• Understand identities • Factor expressions • Simplify rational expressions	• Critical thinking • Visualization • Concept clarity	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
JULY		**Linear Equations in Two Variables**	• Graph plotting • Real-life problem solving •	• Solve equations graphically & algebraically • Interpret	• Analytical reasoning •	* Exercise Questions & Answers to be assessed * MCQ based Questions *

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			Substitution & elimination method	solutions • Model real-life problems	Decision-making • Application skills	Case study-based questions * Assertion Reason Questions
JULY		**Coordinate Geometry**	• Plotting points on graph • Distance & midpoint activity • Grid-based floor plan	• Locate points • Find distance & midpoint • Verify geometrical properties	• Visualization • Spatial understanding • Accuracy	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
AUGUST		**Euclid's Geometry**	• Axiom-based discussion • Construction activity • Historical exploration	• Understand axioms & postulates • Apply logical reasoning • Develop proof skills	• Logical thinking • Mathematical reasoning • Discipline	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
AUGUST		**Lines and Angles**	• Angle measurement • Parallel line activity • Theorem verification	• Identify angle types • Apply theorems • Solve problems	• Analytical skills • Logical reasoning • Observation	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
SEPETEMBER		**REVISION &**	**HALF YEARLY EXAM**			
OCTOBER		**Triangles (Congruence)**	• Triangle model making • Congruence proof activity • Real-life applications	• Apply congruence rules • Prove theorems • Solve geometrical problems	• Critical thinking • Accuracy • Reasoning skills	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions

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OCTOBER		**Quadrilaterals**	• Paper folding activity • Midpoint theorem verification • Diagram analysis	• Understand properties of parallelogram • Apply midpoint theorem	• Logical reasoning • Visualization • Analytical thinking	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
NOVEMBER		**Circles**	• Circle construction • Chord & angle activity • Real-life examples	• Understand circle properties • Apply theorems • Solve problems	• Observation • Concept clarity • Reasoning	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
NOVEMBER		**Mensuration (Area & Perimeter)**	• Area calculation • Heron's formula activity • Real-life measurement	• Calculate area & perimeter • Apply formulas • Solve practical problems	• Practical skills • Accuracy • Application	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
DECEMBER		**Surface Area & Volume**	• Model making (3D shapes) • Volume calculation • Real-life applications	• Calculate surface area & volume • Understand 3D shapes	• Spatial thinking • Visualization • Application skills	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
DECEMBER		**Statistics**	• Data collection survey • Graph plotting • Mean/median/mode calculation	• Interpret data • Calculate averages • Analyse graphs	• Data analysis • Logical thinking • Decision-making	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions

MONTH	NO. OF CLASSES	TOPIC TO BE TAUGHT	ACTIVITY	LEARNING OUTCOME	VALUES & SKILLS IMPARTED	ASSESSMENT
JANUARAY		**Probability**	• Coin/dice experiment • Tree diagram activity • Real-life probability cases	• Understand probability • Compute outcomes • Apply in real-life	• Analytical thinking • Prediction skills • Reasoning	* Exercise Questions & Answers to be assessed * MCQ based Questions * Case study-based questions * Assertion Reason Questions
JAN – FEB		**REVISION &**	**ANNUAL EXAM**			

SUBJECT TEACHER : SUDIPTA KUMAR GHOSH **PRINCIPAL**