SANT NANDLAL SMRITI VIDYA MANDIR, GHATSILA

YEARLY SYLLABUS OF GANITA PRAKASH (MATHEMATICS)

SESSION – 2026-2027

STD – VIII

MONTH	NO. OF CLASSES	TOPIC TO BE TAUGHT	ACTIVITY	LEARNING OUTCOME	VALUES & SKILLS IMPARTED	ASSESSMENT
APRIL		A Square and A Cube	• Identify square & cube numbers using dot patterns • Use grid paper to form squares • Puzzle on perfect squares	• Understand square & cube numbers • Identify patterns in numbers • Apply concept in problem solving	• Logical thinking • Pattern recognition • Observation skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
APRIL		Power Play (Exponents)	• Express large numbers using powers • Scientific notation activity • Matching exponent rules game	• Understand laws of exponents • Simplify expressions • Apply exponents in real life	• Analytical thinking • Accuracy • Problem-solving skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions

MAY		A Story of Numbers	• Timeline chart of number system • Group discussion on evolution of numbers • Roman numerals activity	• Understand number systems • Convert between forms • Appreciate historical development	• Critical thinking • Awareness of history • Communication skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
JUNE		Quadrilaterals	• Draw different quadrilaterals using ruler • Measure angles using protractor • Property verification activity	• Identify types of quadrilaterals • Understand properties • Solve geometrical problems	• Spatial understanding • Logical reasoning • Accuracy	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
JULY		Number Play	• Divisibility rule games • Factor tree activity • Puzzle solving	• Apply number properties • Solve numerical problems • Develop number sense	• Reasoning ability • Speed & accuracy • Analytical skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions

JULY		Algebra (Distributive Law)	• Expand expressions using tiles • Simplification exercises • Real-life algebra problems	• Understand distributive property • Simplify algebraic expressions • Apply in equations	• Logical reasoning • Problem-solving • Abstract thinking	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
AUGUST		Proportional Reasoning	• Ratio comparison activities • Real-life problems (speed, price) • Table completion	• Understand ratios & proportions • Solve word problems • Apply in daily life	• Decision-making • Analytical thinking • Application skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
AUGUST		Fractions in Disguise (Percentages)	• Discount calculation activity • Profit & loss role play • Convert fractions to %	• Understand percentage • Solve real-life problems • Convert forms	• Financial awareness • Practical thinking • Accuracy	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions

SEPTEMBER		Baudhayana–Pythagoras Theorem	• Verify theorem using paper cutting • Right triangle measurement • Practical demonstration	• Understand Pythagoras theorem • Apply in geometry problems • Solve real-life applications	• Logical proof skills • Spatial reasoning • Analytical thinking	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
SEPTEMBER		Proportional Reasoning – 2	• Pie chart construction • Inverse proportion examples • Data interpretation	• Understand direct & inverse proportion • Interpret graphs • Solve problems	• Data analysis • Critical thinking • Interpretation skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
SEPTEMBER	REVISION & HALF-YEARLY EXAMINATION					
OCTOBER		Exploring Geometrical Themes (3D)	• Model making (cube, cuboid) • Net drawing activity • Fractal patterns drawing	• Understand 3D shapes • Visualize geometry • Recognize patterns	• Creativity • Visualization • Innovation	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions

NOVEMBER		Tales by Dots and Lines (Graphs & Mean)	• Plot line graphs • Find mean of data • Interpret data charts	• Understand mean • Read & interpret graphs • Analyse data	• Data handling • Logical reasoning • Interpretation	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
NOVEMBER		Algebra Play	• Form algebraic expressions from situations • Solve equations • Puzzle-based algebra	• Model real-life situations using algebra • Solve equations • Understand variables	• Abstract thinking • Logical reasoning • Problem-solving	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
DECEMBER		Area (Mensuration)	• Measure classroom objects • Area calculation using grids • Practical problems	• Calculate area of shapes • Apply formulas • Solve real-life problems	• Practical application • Accuracy • Measurement skills	* Exercise Questions & Answers to be assessed * Questions from other reference books will be done * MCQ based Questions will be asked * Short & Long type questions will be asked * Case study-based questions * Assertion Reason Questions
JANUARY & FEBRUARY	REVISION & ANNUAL EXAMINATION					

SUBMITTED BY : SWARAJ KUMAR RANA