SYLLABUS OUTLINE FOR MATHEMATICS CLASS II

Competencies	Main Theme	Activities	Evaluation	Period	Term
GEOMETRY: Understanding shapes and space (3-D, 2-D & 1-D)	Concept of solid figures/ shapes (3-D shapes)	i.Observe s objects in the environment and gets a qualitative feel for their geometrical attribute. ii.Identifies the basic 3-D shapes such as cuboid (e.g. matchbox, brick, etc.), cylinder(e.g. round pencil, section of bamboo, etc.), cone (e.g. funnel, carrot, etc), sphere (e.g. football, balloon, etc.)	Observation and identification.	8	I
	Concept of 2-D figures	i.Traces 2-D outlines of 3-D shapes. ii.Observes and identifies these 2-D shapes. iii.Identifies 2-D shapes, viz, rectangle, square, triangle, circle by their names. iv.Describes intuitively the properties of these 2-D shapes. v.Identifies objects by observing their shadows.	Observation, Identification, Description and Tracing of outlines.	7	II
	Concept of 1-D figures	i.Identifies and makes straight lines by folding a piece of paper (paper folding), straight edged objects (desk, blackboard, etc). ii.Draws a straight line free hand and with a ruler. iii.Draws horizontal, vertical, slant lines (free hand). iv.Draws horizontal, vertical, slant lines using ruler or any straight edged object (e.g. book, folded paper, etc.). v.Distinguishes between straight lines and curved lines.	Identification, Observation, Oral, Written Work.	7	III

NUMBERS: Understanding, reading and writing numbers upto 99.	Concept of 2-digit numbers.	i.Reads and writes numbers upto 99. ii.Count in various ways: - starting from any number. - Group counting, etc.	Oral, Written Work.	25	I
	Concept of place value of 2-digit numbers.	i.Expands a number with respect to place value. ii.Counts and regroups objects in tens and ones. iii.Uses the concept of place value in the comparison of numbers.	Oral, Written Work.		I
	Concept of greater and smaller numbers.	i.Arranges numbers upto 100 in ascending and descending order. ii.Forms the greatest and the smallest 2-digit numbers with and without repetition of given digits.	Written Work.		I
Recognising and reading of Ordinal numbers from 1st to 10th.	Concept of Ordinal numbers	i.Indicates and identifies the position of an object in a line using pebbles, marbles, a group of 10 children in a row, etc. ii.Identifies the difference between Ordinal number and a Cardinal number.	Identification and Oral.	5	I
Ability to compute Addition	Concept of Addition of 2-digit numbers.	i.Adds 2-digit numbers by drawing representation of tens and ones with and without grouping. ii.Adds zero to a number. iii.Observes the commutative property of addition through patterns. iv.Solves addition problems presented through pictures and verbal description. v.Describes orally the situations that correspond to the given addition facts. vi.Estimates the results of addition and compares the result with another given number.	Observation, Oral and Written work.	15	II

Subtracting 2-digit numbers.	Concept of subtraction of 2-digit numbers.	i.Subtracts 2-digit numbers by drawing representation of tens and ones with and without grouping. ii.Subtracts zero from a number. iii.Solves subtraction problems presented through pictures and verbal description. iv.Describe orally the situations that corresponds to the given subtraction facts. v.Estimates the results of subtraction and compares the results with another given number.	Observation, Oral and Written work	12	II
Preparing for multiplication and division	Concept of multiplication and division	i.Dicussion of situations involving repeated addition (e.g. 2+2+2+2 = 8 and 4 x 2 = 8) and situations involving sharing (e.g. 6 marbles to be shared equally among 3 children). ii.Activities of making equal groups.	Discussion and Written Work.	15	III
MENTAL ARITHMETIC: Ability to compute mentally.	i. Addition ii. Subtraction iii. Multiplication	i.Adds and subtracts single digit numbers mentally. ii.Adds and subtracts multiples of tens mentally. iii. Multiplies single digit numbers mentally.	Oral and Written Work	10	II, III
MONEY: Ability to use standard unit of money.	Concept of rupees and paise (not exceeding Rs. 50.)	i.Identifies currency- notes and coins. ii.Puts together amounts of money not exceeding Rs.50. iii.Adds and subtracts small amounts of money mentally.	Observation, Identification, Comparison and Oral.	5	II
MEASUREMENT: **Length:** Understands the importance of measurements.	Concept of measurement of length using non-standard units.	i.Measures lengths and distance along short and long paths using uniform (non-standard) units extends to longer lengths.	Measurement.	5	I

Weight: Understanding weight.	Ability to compare weight of given objects.	i.Compares two or more objects by their weights. ii.Appreciates the need for simple balance. iii.Compares weights of given objects using simple balance.	Observation, Comparison and Oral.	6	III
Capacity: Understands volume of containers.	Concept of capacity of containers.	i.Compares and orders containers in terms of internal volume (Capacity). ii.Orders given containers as per their capacities on the basis of perception and verifies by pouring out.	Observation, Comparison and Oral.	6	III
Time: Understanding time.	Concept of time based only on days, weeks, months, years, seasons, etc.	i.Gets familiar with the days of the week and months of the year. ii.Gets a feel for sequence of seasons (varying locally). iii.Sequence the events occurring over longer periods in terms of days and dates.	Observation, Oral and Written work.	5	III
DATA HANDLING: Understands the importance of data collection.	Concept of data collection.	i.Collects data through measurement. ii.Represents the data followed by discussion (e.g. heights of children). iii.Collects and presents the data on birthdays. iv.Draws inference from tha data at the appropriate level.	Collection, Representation, Observation and Written Work.	10	III
PATTERNS: Understanding patterns.	Concept of pattern in sequence of shapes and numbers.	i.Observes and extends patterns in sequence of shapes and numbers. ii.Searches for patterns in different ways of splitting a number. iii.Creates block patterns by stamping thumbprints, leaf prints, vegetable prints, etc. iv.Creates pateerns of regular shapes by stamping.	Observation, Oral and Written work.	8	II