# P.5 MATHEMATICS SCHEME OF WORK FOR TERM I

| Wk | Pd | Topic | s/topic | Content | Subject competences | Language competences | Methods | Life skills | Teaching aids | Teaching act | Ref |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | Set concept | Types of sets | Definition of a set Equivalent sets Equal sets Joint and disjoint sets Matching sets Empty sets | Defines a set Identifies different types of sets | Names different types of sets Pronounces Spells and Constructs sentences | Discussion Demonstration Illustration Explanation | Critical thinking Creative thinking Effective communication | Real objects Coins Tins Pens Books | Drawing Oral Discussion Written exercises Collecting materials | Mk old edition pg 1 – 25 Mk new edition pg 1 – 22 Function MTC 1 – 15 |
| | | | Sets and Venn diagrams Difference of sets Shading and describing regions Number of elements Sub sets | Union of sets Intersection of sets Representing union and intersection sets on Venn diagrams Difference of sets (complement) Shading regions Describing shaded regions Number of elements Defining subsets Listening subsets Finding number of subsets Representing | Forms sets Shades regions Represents union and intersection on Venn diagrams Lists sub sets Finds number of subsets | Spells Pronounces Makes sentences using words like union intersection | | | | Forming and drawing Drawing venn diagrams Identifying members of union and intersection set on the venn diagram Drawing venn diagram and using them | P. 5 curri pg 85-86 |

| Week | Period | Topic | Subtopic | Content | Skills | | | Methods | Teaching aids | Activities | References |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | subsets on a Venn diagram | | | | | | | |
| 2 | 1 to 6 | | Probability | Place coins Rolling a dice Colours Days of the week | Tosses a coin Rolls a dice | Writes the sample space Finds the probability | | | | | |
| 2 | 1 to 6 | Whole numbers | Place values Values of digits Writing in figures and words Forming numbers from digits | Place values of whole numbers upto millions Values of digits up to 999999 Writing in figures and words up to 9999999 Forming numbers from digits | Identifies place values Finds values of digits Writes numbers in words and in figures Forms numbers from digits | Names place values up to millions Reads numbers in words Writes expanded numbers in words Reads and writes Roman numerals | | Critical thinking Problem solving | A chart showing place values and values of numbers | Identifying place values up tot six digits Working out values of digits Rounding of whole numbers Reading and writing roman numerals Converting Hindu Arabic numeral and vice versa | Mk old edition pg 28 – 57 Mk new edition 24 – 29 Functional MTC for Ugpg 17 – 43 Pri curri 87-88 |
| 3 | 1 to 6 | | Expanded notation Rounding off whole numbers Roman numerals | Expanding numbers using values, multiples of 10 place values and powers of 10 Changing from expanded to single numbers Rounding off | Expands six digit number Rounds off whole Rounds off whole numbers to ten thousands Reads and writes Roman | | | Guided discussion Explanation Illustration Guided discovery Group work | | | |

| | | | | whole numbers up to 10000 Roman numerals up to 1000 Roman to Hindu and vice versa | numbers up to 1000 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 1 to 6 | Operation on whole numbers | Addition of whole numbers Subtraction of whole numbers Multiplication of whole numbers Division of whole numbers by two digit numbers | Addition of whole numbers up to six digits without regrouping Addition with regrouping Word problems involving addition Subtracting upto six digits without regrouping Subtraction with regrouping Word problems Involving subtraction ] Multiplication by two digit numbers Word problems Involving multiplication Dividing | Adds whole numbers up to 6 digits without regrouping and with regrouping Solves word problems Subtracts whole numbers up to 6digits solves simple word problems Multiplies numbers up to 4 digits by 2 digit numbers Divides whole numbers by 2 digit numbers with or without remainder | Spells the word addition Pronounces Spells the word addition Use addition sentences Uses other terms correctly for subtraction such as decrease , takeaway, minus or less than in sentences | Discussion Explanation Illustrate Demonstratio n Inquiry Role paly | Critical thinking Effective communicati on Problem solving | Work Cards Counters Books | Computing problems involving addition Subtraction Multiplicatio n Division Solving simple word problems in real life situation | Mk old edition pg 58 – 95 New Mk pg 47 – 76 Understandi ng MTCbk 5 pg 37 – 59 Functional MTCbk 5 pg 45 – 80 Pri five curri pg 88-89 |

| | | | | numbers without remainders Dividing whole with remainders Word problems involving division | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 1 to 6 | Whole numbers | Mixed operations Statistics | Use of BODMAS Finding mode of given data Working out median of given data Finding mean/average Finding range comparing numbers using symbols >, <, = comparing average and total | Uses operations of (+, -, x and ÷) to solve problems in real life situations Finds, mode, median, mean and range Compares average and total | Spells words Mode Median Average Range Use words above in sentences Interpreting problems involving four basic operation | | | Reading and solving real life problem | | |
| 6 | 1 to 6 | | Numbers in base five Bases 5 | Grouping in base five and ten Place value of bases Writing bases in words Expanding in bases 5, Changing from bases 5, to base | Counts in base five two and seven Adds in bases 5, Subtracts in bases 5, Multiplies numbers in bases 5, | Spells words Base Expand Five Seven etc Pronounces words above | Guided discussion Demonstration Group work Explanation | Critical thinking Problem solving | Counting Computing problem involving addition, subtraction and multiplication of numbers in bases | Prepared charts Counters | |

| | | | | ten. Changing from base ten to 5, addition of bases 5, Subtraction of bases 5 Multiplication | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Finite system | Counting in figure five and seven Expressing numbers in finite five and seven Addition and subtraction using a dial Addition and subtraction without using a dial | Adds using a dial and without using a dial | | | | | | | |
| 7 | 1 to 6 | Patterns and sequences | Divisibility tests Multiples of numbers LCM Factors GCF Prime and Composite numbers | Divisibility tests of 2, 3, 4, 5, 10 Multiples of given numbers Finding LCM Finding factors of numbers Finding GCF Definition of prime and composite numbers | Forms patterns using increasing and decreasing progression Identifies triangular, square composite numbers and Prime numbers Works out LCM and | Spells words Divisibility Multiples Factors Pronounces the above words Uses above words in sentences | Discussion Questions and answer Group work Explanation | Critical thinking Creative thinking Problem solving | Work cards Charts Prepared charts | Identifying and listing types of numbers Listing factors and multiples of numbers Finding the LCM and GCF | Mk new edition bk 5 pg 77 – 92 Functional MTCpg 85 – 107 Pri five curri pg 90-91 |

| Wk | Pd | Topic | | | | | | | | | |
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| | | | | GCF | | | | | | | |
| 8 | 1 to 6 | | Prime factorization Square numbers Square roots Sets of numbers Magic squares | Use of factor tree and ladder to prime factorise Find LCM and GCF using prime factors Finding squares of numbers Finding square roots Application of square roots Natural odd, even, prime triangular numbers Numbers sequences Operation on patterns (sum, difference, product) Completing magic squares | Uses types of numbers to form number patterns and sequences Describes and solves number patterns and sequences Completes magic squares correctly | Do | Do | Do | Do | Finding LCM and GCF using prime factorisation and solve number patterns | |
| 9 | 1 to 6 | Fractions | Types of fractions Equivalent fractions Reducing fractions Ordering fractions Comparing fractions | Definition of fractions Types of fractions Finding equivalent fractions Reducing fractions Ordering | Adds fractions with different denominators Reduces fractions Orders fractions | Spells words Fraction Equivalent Denominators Uses above in sentences | Explanation Illustration Question and answer Group work Guided discussion | Effective communication Problem solving | Work cards c/b illustration | Adding fractions with different denominators Answering oral questions and written | Mk new edition pg 45 – 48 Function MTCbk 5 pg 141 – 166 Understanding MTCbk 5 pg 60 – 96 |

| Week | Period | | Topic | Content | Behavioural Objectives | Activities | Teaching Method | Skills/Values | | Evaluation | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Operation on fractions | fractions Comparing fractions using >,< or = Adding fractions with different denominators Addition of whole numbers to fractions Adding mixed fractions Word problems in addition of fractions | Finds equivalent fractions | | | | | exercises Subtracting of fraction with different denominators | |
| 10 | 1 to 6 | | Subtraction Multiplication | Subtraction fraction with same denominator Subtraction with different denominator Fractions from whole numbers Subtracting mixed fractions Mixed operation (+ & -)using BODMAS Multiplying wholes and fractions using | Subtracts fractions with different denominators Multiplies fractions by proper fractions Multiplies fractions by natural numbers Multiplies fractions by fraction | Reading and solving fractions involving subtractions reading and solving fractions involving multiplication of fractions | Guided discussion Discovery Group work Demonstration | Effective communication Problem solving | | Dividing proper fraction by proper fractions Dividing fractions by natural numbers | Do |

| | | | | repeated addition Multiplying fractions by natural numbers Multiplying fractions by fractions Multiply mixed fractions Application of fractions (use of "of") | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 1 to 6 | | Division of fractions | Finding reciprocals of whole numbers Finding reciprocals of fractions Finding reciprocals of mixed fractions Dividing fractions using LCM and reciprocals. Division of whole numbers by fractions Division of fractions by whole numbers Dividing | Divides proper fractions by proper fraction Divides fractions by natural numbers and vice versa Interprets and solves problems in real life situation | Reading words Spells words reciprocals Reading and solving problem s involving division of fractions | Do | Do | Do | Do | Do |

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| | | | | fractions by fractions Dividing mixed fractions by mixed fractions Word problems involving division of fractions | | | | | | | |
| | | | **Term** | **Two** | | | | | | | |
| 1 | 1 to 7 | Decimal fractions | Place values of decimals Values of decimals Decimals in figures and words Expanding decimals Common fractions in decimals Mixed fractions as decimals Decimals to common fractions | Place values of decimals upto thousandths Values of decimals upto hundredths Decimals in figures and words upto ten thousandths Expanding decimals using values and powers Finding expanded numbers (single numbers) Changing common fractions to decimals Changing mixed | Identifying place values of each digit up to thousandth Finding values of digits in decimals Converting decimals to fractions and vice versa Adds and subtracts decimals Solves word problems | Naming place values Reading and writing values of decimals in words. Reads aloud and solves problems Involving decimals Reading and interpreting word problems | Discussion Demonstration Discovery Participatory learning | Effective communication Problem solving | Work cards Chalk board illustrations | Finding place values of digits in numbers Converting decimals into fractions Ordering decimals using a number line Adding and subtracting decimals | |

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| | | | | fractions to decimals Changing decimals to common fractions | | | | | | | |
| 2 | 1 to 7 | | Comparing decimals Ordering decimals Operations on decimals (+, -, x, ÷) | Comparing decimal using symbols(>,< or =) Ordering decimal fraction decimals addition of Subtraction of decimals Multiplication of decimals (simple decimals) Division of decimals Word problems in decimals Rounding off decimals | Comparing decimals using (>,<, or=) Ordering fractions (decimal) Operation on decimal fraction (+, -, x,÷) | Reading and interpreting word problems involving decimals | Do | Do | Do | Answering oral and written exercises | |
| | 1 to 10 | Measurement | Money | Simple rates and proportions Buying and selling Buying price Selling price Profits and loss Shopping bill Completing bill tables | Solves practical problems related to buying and selling using Uganda Currency Uses practical examples to describe | Describe profits gain loss and other related terms Role by plays Buying and selling | Demonstrations Explanation Guided discovery | Problem solving Logical thinking Effective communication Creative thinking | Price list chart Uganda currency notes | Computing and solving problems related to profit and loss. Role play buying and selling | p.5 curri pg 100-101 |

| | | | | Transport charges | simple profits and loss | | | | | | |
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| | 1 to 1 0<br><br>1 to 1 0 | | Time<br><br><br><br><br><br><br><br><br><br><br><br>Time tables Distance Speed Time | Telling time in am and pm Hours to minutes and vice versa Addition and subtraction of time Finding duration Interpreting time tables Finding distance, time and speed | Tells time in 12hr clock Finds duration Solves problems related to speed, distance and time Recognizes minutes and seconds | Constructs phrases involving time Explains the meaning of am and pm Reds and tells time verbally on the 12 hours clock | Do | Effective communicati on Decision making Problem solving | Clock Time table Charts | Reading and telling time up to the seconds Working out duration Calculating speed Distance And time | |
| | 1 to 1 2 | Geometry | Parallel lines perpendicul ar lines Intersecting lines polygons Lines of folding symmetry Circles Triangles Hexagons Squares Rotation and revolution | Definition of parallel and perpendicular lines Drawing parallel lines intersecting liens Drawing perpendicular lines Construction of circles Constructing regular polygons in a circle Equilateral triangles Regular | Identifies and draws parallel intersecting and perpendicul ar lines Constructs triangles , circles and regular hexagons Describes lines of folding symmetry Draws and measures angles | Describes parallel lines intersecting and perpendicula r lines polygons Labels angles Reds and writes sentences about the angels Describes the parts of circles | Do | Do | Ropes Sticks Geometry tools | Constructin g lines Geometrical instruments Constructs polygons Folds various models to recognize and identify lines of folding symmetry | Mk bk 5 pg 175 – 197 |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | hexagon An equilateral triangle without a circle Constructing a square Types of triangles Examples of quadrilateral Other polygons Folding lines of symmetry | | | | | | | |
| 1 to 8 | | | Angles | Angles and revolutions Angles on a compass Types of angles Measuring angles using a protractor Drawing angles using a protractor Clockwise and anticlockwise directions Complementary and supplementary angles, Interior angles | Draws and measures angles Draws diagrams to show rotation and revolutions Names examples of rotations Follows instructions to draw rotations and revolutions | Reads and spells words revolutions protractor Supplementary Writes sentences using the above words | Do | Do | Do | Constructs rotations using their toes | Do |
| | | Data handling | Picto graph | Pictograph interpretation Drawing pictographs | Draws and recognizes scales on the | Pronounces Horizontal Vertical Axis | Discussion Guided discovery Explanation | Effective communication Critical | A chart showing bar or line graph | Drawing graphs Representing | New mkbk 5 pg 214 to 231 |

| | | | Topic | Content | Skills | Language | Methods | Values | Materials | Activities | References |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Reading and interpreting tables Drawing and interpreting tables Drawing bar graphs from tables Bar graph interpretation Recording information from a bar graph into a table | horizontal and vertical axes Represents and interprets data on bar and line graph Determines and uses the average of bar and line graphs | Graphs Spells words Horizontal Vertical Axis Graphs Reads and interprets information on bar and line graphs | | thinking | | Interpreting data on graphs Working out average of given data | P.5 curri pg 97-98 |
| | | | Temperature | Describing temperature Instruments to measure used to measure temperature Drawing the thermometer Units used to measure temperature Reading minimum and maximum temperature Word problems on temperature Reading temperature on a graph | Describes temperature Draws a thermometer Recognizes units of temperature Draws temperature bar graphs | Pronounces Temperature Degrees Spells Temperature Degrees Use temperature in sentences Reads | Group discussion Discovery Explanation | Effective communication Problem solving | Thermometer Charts | Describing temperature Reading and interpreting graphs on temperature | A new mk bk5 pg 233 – 236 Understanding MTCbk 5 pg 190 – 193 |

## P.5 MATHEMATICS Term Three

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | | Measurements | Length, Mass and capacity | Units used to measure length Estimating length Measuring length of objects Conversion of units e.g. cm to mm and vice versa. M to cm and vice versa Km to m and vice versa | Converting mm to cm Cm to m Km to m And vice versa | Constructing sentences using mm, cm, m, km | Guided discovery Discussion Explanation | Logical thinking Effective communication Problem solving | Ruler Books Stick Metric tables | Converting cm to m M to k and vice versa | Mk new edition pg 151 – 156 Functional MTC bk5 pg 161 P.5 curri pg 94-95 |
| 4 | 1 to 2 | | Perimeter Area | Perimeter of figures Triangles, rectangles, squares, pentagon, hexagon Combined figures Area of figures triangles, rectangles, squares, combined figures Difference in area | Calculates perimeter and area of figures | Reads and interprets perimeter and area | Do | Do | Do | Calculating perimeter and area of figure | |
| 5 | 1 to 1 0 | | Volume Total surface area | Volume cuboid and cubes Application of | Solving problem involving volume and | Reads and interprets word problem | Demonstration Discovery Explanation | Do | Boxes Container Cups Jerry cans | Working out problems involving volume | New mk bk5 pg 161 – 163 Understandi |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Capacity Weight (mass) | volume Total surface area of a cuboid Unity for capacity Litres to ML/cm$^3$ and vice versa Describing mass or weight Basic units of mass Kg to gm and vice versa | total surface area | involving volume, total surface area, capacity and mass | | | etc | TSA capacity and mass | ng MTC bk5 pg 161 |
| 1 | 1 to 10 | Integers | Positive and negative integers Inverse of integers Operation on integers Ordering integers Comparing integers Simple word problems | Defining integers Identifying positive and negative integers Representing integers on a numberline Ordering integers Comparing integers Finding inverse of integers Addition of integers using a number line Subtraction of integers using a number line Forming mathematical | Draws number lines Identifies positive and negative integers Arranges integers Compares integers using >,< or = Adds integers Subtracts integers Solves simple word problems | Pronounces integers Spells the word integers Positive and negative Uses the words Greater than Less than Equal to Reads word problems involving integers | Demonstration Discussion Explanation Discovery | Problem solving Critical thinking | Charts showing into | Adding and subtracting integers Using number lines to describe negative and positive Writing integers in ascending and descending order Comparing integers using symbols | Mk new edition bk5 pg 95 – 114 Mk new edition bk 6 pg 103 – 111 Functional MTCbkpg 109 – 121 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | sentences Addition of integers without a number line Subtraction of integers without a number line | | | | | | | |
| 2 | 1 to 12 | Algebra | Collecting like terms Substitution Forming algebraic expressions Solving equation Forming and solving equations | Forming algebraic expression Collecting like terms Substitution Solving equations by Subtracting Adding Word problems involving subtraction and addition Solving by dividing Solving by multiplying Word problems involving division and multiplication | Forms algebraic expressions Collect like terms Solves simple equations\ Forms algebraic equations Collects like terms Solves simple equations | Pronounces substitution Equations Spells Like terms Uses substitution and equation in sentences | Do | Do | Chalk board illustrations | Forming algebraic expressions Collecting like terms Solving simple word problems | Mk bk5 pg 271 – 283 |
| 3 | 1 to 10 | Algebra | Removing brackets Mixed equations Equations involving squares | Solving equations involving squares Solving equations involving | Solves simple word problems Applying algebraic in volume, area, and | Pronounces Brackets Equations Squares Spells Brackets Equations | Do | Do | Do | Solving simple and problems Oral and written exercises | Mk bk 5 pg 280 – 287 |

| | | | | squares and square roots Application of algebraic Perimeter Area Volume | perimeter | Squares | | | | | |
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