## WEEKLY SYLLABI BREAKDOWN : ACADEMIC SESSION 2020-21

MATHEMATICS: CLASS - VII

## Countdown

Book-7

| Academic Week | Unit/Chapter \& Topic | Personality Grooming Activities |
| :---: | :---: | :---: |
| 1 | Ice-Breaking at the Session Commencement <br> [Introduction with classes, Overview of Textbooks/ Syllabi/ Time Table and General Academic Scheduling] <br> (Pages 2-5) Recapitulation....An overview is to be given only. This part is non examinable. <br> (Pages 6-12 ) Unit 1: Operation of Sets, Basic Concepts of Sets, Set representation and Types, Cardinal of a Set, Equivalent Sets, Operations on Sets, Universal Set, Complement of a Set, <br> Exercise 1 (Associated Topics) | Introduction of students with his/her classmates, Teachers and School environment <br> Spring Day |
| 2 | (Pages 12-18) Unit 1(Contd): Venn Diagrams, Properties of Sets, Exercise 1, MCQs 1 <br> (Pages 19-22) Unit 2: Rational Numbers, Rational Numbers on the Number Line, Exercise 2a. | Two minute talk by 2-3 children in each class daily revealing their talents and building their confidence |
| 3 | (Pages 23-33) Unit 2 (Contd):Standard Form, Ordering Rational Numbers, Comparing Rational Numbers, Reciprocal of a Rational Number, Exercise 2b, Operations on Rational Numbers, Exercise 2c, MCQs 2 | Talk on National Security |
| 4 | (Pages 34-38) Unit 3: Decimal Numbers, Decimal Representation, Conversion of Fractions into Decimal Numbers, Conversion of Percentages into Decimal Numbers, Conversion of decimal Numbers into Percentages,Conversion of Decimal Numbers into Fractions, Exercise 3 (Associated Questions) | Importance of Ramadan <br> Activity: Converting the fractions to decimals as mentioned on page 40 (Side Bar) |
| 5 | (Pages 38-46) Unit 3 (Contd):Terminating and NonTerminating Decimals, Approximation and Rounding Off, Exercise 3, MCQs 3 | Importance of Labour Day |
| 6 | (Pages 47-56) Unit 4: Squares and Square Roots, Perfect Squares, Square Roots of Positive Integers, Determination of Positive Square Roots by Prime Factors, Exercise 4a | Celebration of Mother's Day |
| 7 | (Pages 56-60) Unit 4 (Contd): Determination of Positive Square Roots by Division, Exercise 4b, MCQs 4 <br> (Pages 61-64) Unit 5: Exponents, Exponential Notations and Rational Numbers, Reciprocals with Positive Integral Exponents, Reciprocals with Negative Integral Exponents, Exercise 5 (Associated Topics) |  |


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| 8 | (Pages 65-70) Unit 5 (Contd) : Laws of Exponents, Product Law, Quotient Law, Power Law, Zero Exponent, Exercise 5, M CQs 5 | Teacher will guide the students to develop their personal diaries/scrap book/observations to record their summer vacation activities (no specific format or layout) Importance of Eid ul Fitar |
| 9 | (Page 71) Revision : Numbers..........Omit <br> (Pages72-78) Unit 6 : Direct and Inverse Variation, Direct Variation, Inverse Variation, Exercise 6 (Associated Problems) <br> REVISION OF ALL CORE CONCEPTS |  |
| 10 | (Pages79-85) Unit 6 (Contd) : Continued Ratio, Speed, Time and Distance,Using Proportions, Dividing in Given Ratio, Exercise 6, MCQs 6 | Sharing the Summer Vacation diaries etc. |
| 11 | (Pages 86-97) Unit 7: Financial Arithmetic, Examples (Profit and Profit per Cent, Loss and Loss per Cent), Exercise 7a, Simple Discount,Discount, Profit and Loss Percent, Successive Discounts, Overheads, Exercise 7b | Celebration of Independence Day |
| 12 | (Pages 98-105) Unit 7 (Contd): Property Tax, General Sales Tax, Exercise 7c,Simple Interest, Zakat, Ushr, Exercise 7d, MCQs 7 <br> (Pages 106-107) Revision : Arithmetic, Test Paper 1....Omit | Activity: Collecting discount vouchers /cards /coupons and then estimating discounted price. |
| 13 | (Pages 108-113) Unit 8: Algebraic Expressions, Exponents, Variables, Coefficients and Constants, Algebraic Expressions, Polynomials, Arranging Polynomials in Increasing and Decreasing Order, Like and Unlike Terms, Addition and Subtraction of Algebraic Expressions, Exercise 8a |  |
| 14 | (Pages 113-119) Unit 8 (contd): Multiplication of Algebraic Expressions, Division of Algebraic Expressions, Exercise 8b, MCQs 8 | Defence Day Celebration Importance of Ashora-eMoharram |
| 15 | (Pages 120-126) Unit 9: Algebraic Identities, Square of the Sum of Two Terms, Square of the Difference of Two Terms, Product of the Sum and Difference of Two Terms, Exercise 9, MCQs 9 | Importance of Ashora-e-Moharram |
| 16 | (Pages 127-129) Unit 10: Factorization of Algebraic Expressions, Factorization by Using Algebraic Identities, Exercise 10a |  |
| 17 | (Pages 129-132) Unit 10 (Contd): Factorization by the Differernce of Two Squares, Factorization by Making Groups, Exercise 10b, MCQs 10 |  |
| 18 | (Pages 133-138) Unit 11: Simple Equations, Equation and Identity, Unknown Quantity and Root, Exercise 11a | Celebration of World Teacher's Day |


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| 19 | (Pages 139-141) Unit 11 (Contd) : Problems on Simple Equations, Exercise 11b, MCQs 11 <br> (Page 141) Exercise 11b Questions11-16.......... Omit <br> (Pages 142-143) Revision: Algebra...................Omit <br> (Pages 144-145) Test Paper 2. Omit <br> REVISION OF ALL CORE CONCEPTS | $\frac{\text { Celebration of World Teacher's }}{\text { Day }}$ |
| 20-21 | MID - TERM EXAM (PLAIN AREAS) |  |
| 22 | (Pages 146-154) Unit 12: Lines and Angles, Perpendicular Lines, Construction of Perpendicular Lines, Parallel Lines, Transversal, Properties of Parallel Lines, Construction of Parallel Lines, Exercise 12a | Importance of Rabi-ul Awal and Seert-un-Nabi |
| 23 | (Pages 155-158) Unit 12 (Contd):Angles, Angles in a Triangle, Exercise 12b, MCQs 12 |  |
| 24 | (Pages 159-166) Unit 13:Geometrical Constructions, Bisecting a Line Segment, Bisecting an Angle, Constructing Perpendicular Lines, Constructing Angles, Exercise 13a | Celebrations of Iqbal's Day |
| 25 | (Pages 167-173) Unit 13 (Contd):Constructing Triangles, Exercise 13b, MCQs 13 |  |
| 26 | (Pages 174-180) Unit 14: CirclesCompasses, Elements of a Circle, Interior and Exterior of a Circle, Constructing a Circle, Constructing a Semi Circle, Concentric Circles, Exercise 14a |  |
| 27 | (Pages 180-184) Unit 14 (Contd): Properties of Circle, Exercise 14b, MCQs 14 |  |
| 28 | (Pages 185-189) Unit 15: Congruence and Similarity,Congruency, Congruent Figures, Similarity, Exercise 15 (Associated Questions) |  |
| 29 | (Pages 189-195) Unit 15 (Contd) : Congruent Triangles, Properties of Congruent Triangles, Exercise 15, MCQs 15 | National Resolve Day to Promote Education |
| 30 | (Pages 196-201) Unit 16: Quadrilaterls, Quadrilaterals, Parallelograms, Construction of a Parallelogram, Exercise 16 (Associated Questions) | Celebration of Quaid's Day |
| 31 | (Pages 202-207) Unit 16 (Contd): Rectangle, Rhombus, Property of rhombus, Exercise 16, MCQs 16 <br> Pages (208-211) Revision: Geometry, Test Paper 3..........Omit |  |
| 32 | (Pages 212-221) Unit 17: Perimeter and Area of Geometrical Figures, Perimeter, Perimeter of Quadrilaterals, Area, Area of Square, Rectangle, Parallelogram, Triangle, Trapezium, Rhombus, Numerical Examples, Exercise 17a | Talk on Discipline, Hard work and Motivation |


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| 33 | (Pages 222-226) Unit 17 (Contd) : Tessellations, Circumference of a Circle, Area of a Circular Region, Exercise 17b, MCQs 17 | Project: Find the perimeter of different shapes at home |
| 34 | (Pages 227-232) Unit 18: Volume and Surface Area, Volume and Surface Area, Three Dimensional Objects, Volume and Surface Area of Cubeand Cuboid, Units of Measurement, Standard Units of Volume, Exercise 18a |  |
| 35 | (Pages 233-235) Unit 18 (Contd) : Right Circular Cylinder, Surface Area of a Cylinder, Volume of a Cylinder, Exercise 18b, MCQs 18 <br> (Pages 236-239) Revision: Mensuration, Test Paper 4.......Omit | Kashmir Day |
| 36 | (Pages 240-243) Unit 19: Information Handling, Data Presentation, Ungrouped and Grouped Data, Exercise 19 (Associated Questions) |  |
| 37 | (Pages 243-250) Unit 19 (Contd) : Bar Graphs, Pie Charts, Exercise 19, MCQs 19 <br> (Pages 251-252) Test Paper 5.......Omit |  |
| 38 | Revision (Preferably through conceptual activities where possible) | Farewell party |
| 39-40 | ANNUAL EXAM (PLAIN AREAS) |  |

Note: Teachers are strongly recommended to collect "Guidelines for Teachers" from the offices of the Principlas/VP/HMs for an effective utilization of the syllabi breakdown.Examination pepers will be set according to the said guidelines.

