The City School



CLASS: 8 SYLLABUS FOR FINAL TERM 2018 SUBJECT: Mathematics

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| S.No | Topic | Learning Objectives | Reference |
| 1. | Graphs | In this unit students will to :* Plot the points and draw a straight line graph using these points.
* Find the unknown values of ‘x’ and ‘y’ from the graph.
 | Syllabus - D [Book – 1]Chapter – 12, Ex # 12b Q6,7Chapter – 8, Ex # 8b & 8c [BK – 2] |
| 2. | Graphs | * Solve the simultaneous linear equations using graphical method.
 | Chapter – 8, Ex # 8d [BK – 2] |
| 3. | Algebra | * Expand simple algebraic expressions by using perfect squares and difference of two squares.
 | Syllabus - D [Book – 2]Chapter – 3, Ex # 3a, 3b, 3c Q1,2,3 |
| 4. | Algebra | * Factorise expressions by taking common and grouping.
* Factorise algebraic identities;
* Using perfect squares method.
* Using difference of two squares method.
* Factorise the quadratic expressions by using trial and error method.
 | Syllabus - D [Book – 1]Chapter – 5, Ex # 5g, 5h & 5iChapter – 3, Ex # 3d, 3e Q1-4,7 Ex# 3f [BK – 2] |
| 5. | Algebra | * Solve quadratic equations.
* Solve related word problems.
 | Chapter – 3, Ex # 3g, 3h [BK – 2] |
| 6. | Algebraic Manipulation | * Simplify algebraic fractions to the lowest term.
* Multiply and divide simple algebraic fractions.
* Solve equations involving algebraic fractions.
 | Syllabus - D [Book – 2]Chapter – 4, Ex # 4a, 4b, 4c, 4d & 4g |
| 7. | Algebraic Manipulation | * Solve problems involving algebraic fractions.
* Use skill of solving equations to change the subject of formulae.
 | Chapter – 4, Ex # 4h Q1-10, Ex# 4i & 4e [Bk – 2] |
| 8. | Algebraic ManipulationCongruence And Similarity | * Add and subtract the algebraic fractions.
* Identify congruent and similar figures.
* Use properties of congruent and similar figures.
 |  [Bk – 2] Chapter – 4; Ex# 4f Q1, 2Chapter – 1; Ex # 1a & 1b |
| 9. | Congruence And Similarity (Scale Drawing)Perimeter and area | * Use of linear scale in real life situation.
* Find map length to actual measurements and vice versa.
* Find the area and perimeter of shaded and un-shaded regions in circles and composite shapes.
 | Chapter – 1; Ex # 1c [Bk - 2]Chapter – 12; Ex # 12a [Bk - 3] |
| 10. | Perimeter and area (Mensuration)Time | * Solve problems involving the perimeter and area of a rectangle, triangle, a parallelogram and a trapezium, the circumference and area of a circle.
* Extension of word problem involving speed, distance and time.
 | Chapter – 12; Ex # 12b; Q1 & 2 [Bk - 3]Chapter#10 [W.B-1} Q64,65,66,67,68,69,70,71,85, 86, 87 & 89 |
| 11. | Angle properties of polygon | * Extend the use of angle properties of parallel lines, intersecting lines and triangles to find unknown angles.
* Calculate unknown angles of a given quadrilateral using properties of quadrilaterals.
* Identify and the name the figures when their properties are given.
 | Chapter – 15; Ex # 15b [Bk - 1]Addendum Ex # 1d [Bk - 1] |
| 12. | Data Handling | * Collect, classify, tabulate and interpret grouped and ungrouped data.
* Construct a frequency table of a grouped data.
* Draw and interpret histogram representing grouped data.
* Find mean, median and mode of a un-grouped data.
 | Chapter – 13; Ex # 13d & 13e [Bk - 1]Chapter – 11; Ex # 11b; Q7 – 13, Q14(b, c, d) Q15 – 19 [Bk - 3] |