CLASS: 8 SYLLABUS FOR FINAL TERM 2018 SUBJECT: Mathematics

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 Q6,7 Chapter – 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 & 5i Chapter – 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 Manipulation Congruence 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, 2 Chapter – 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)	• Solve problems involving the perimeter and area of a rectangle, triangle, a parallelogram and a trapezium, the circumference and area of a circle.	Chapter – 12; Ex # 12b; Q1 & 2 [Bk - 3]
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]