



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF MATHEMATICS
CLASS IX

REVISED YEAR PLAN (2020-2021)

Subject (Code: 041)

UNIT No.	Unit	Marks
1.	UNIT1: <u>NUMBER SYSTEMS</u> *NUMBER SYSTEMS	08
2.	UNIT2: <u>ALGEBRA</u> *POLYNOMIALS *LINEAR EQUATIONS IN TWO VARIABLES	17
3.	UNIT3: <u>COORDINATE GEOMETRY</u> *COORDINATE GEOMETRY	04
4.	UNIT4: <u>GEOMETRY</u> *LINES AND ANGLES *TRIANGLES *QUADRILATERALS *CIRCLES *CONSTRUCTIONS	28
5	UNIT5: <u>MENSURATION</u> *HERON'S FORMULA *SURFACE AREAS AND VOLUMES	13
6	UNIT6: <u>STATISTICS & PROBABILITY</u> *STATISTICS *PROBABILITY	10
	TOTAL	80

MONTH	UNIT	EXTRA TOPICS (Not to be Tested in Exams)
April 2020 Chapter -3 Chapter -4	CO-ORDINATE GEOMETRY •Cartesian System •Plotting a point in the plane if its Coordinates are given BRIDGE COURSE •Simple equations and rearranging LINEAR EQUATION IN 2 VARIABLES •Introduction • Solution of a Linear Equation	 <div style="background-color: #90EE90; padding: 2px; text-align: center;">Completed</div> <div style="background-color: #90EE90; padding: 2px; text-align: center;">Completed</div>
May 2020 Chapter -4 Chapter -2	LINEAR EQUATION IN 2 VARIABLES(Cont..) • Graph of a Linear Equation in Two Variables • Equations of Lines Parallel to x-axis and y-axis BRIDGE COURSE •Algebraic expression •Factorization POLYNOMIALS •Polynomials in One Variable •Zeroes of a Polynomial • Factorization of Polynomials	*Examples, problems on Ratio and Proportion * Motivate and State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. * $x^3+y^3+z^3-3xyz$ Completed

<p>June 2020</p> <p>Chapter -2</p> <p>Chapter -1</p>	<p>POLYNOMIALS (CONT.....)</p> <ul style="list-style-type: none"> Algebraic Identities <p>BRIDGE COURSE</p> <ul style="list-style-type: none"> Number system-Introduction - BODMAS rule HCF and LCM Rational numbers <p>NUMBER SYSTEM</p> <ul style="list-style-type: none"> Irrational Numbers Real Numbers and their Decimal Expansions <p>ACTIVITY</p>	<p>Completed</p> <p>Completed</p> <p>* Representation of recurring decimals on the number line through successive magnification.</p>
<p>July 2020</p> <p>Chapter -1</p>	<p>NUMBER SYSTEM (Cont..)</p> <ul style="list-style-type: none"> Operations on Real Numbers Laws of Exponents for Real Numbers <p>LINES AND ANGLES</p> <ul style="list-style-type: none"> Basic Terms and Definitions <p>PROJECT WORK</p>	<p>* Every point on the number line represents a unique real number.</p> <p>* Definition of n^{th} root of a real number.</p>
<p>August 2020</p> <p>Chapter 6</p> <p>Chapter 7</p>	<p>LINES AND ANGLES (Cont..)</p> <ul style="list-style-type: none"> Intersecting Lines and Non-intersecting Lines Pairs of Angles Parallel Lines and a Transversal Lines Parallel to the same Line Angle Sum Property of a Triangle <p>ACTIVITY</p> <p>BRIDGE COURSE</p> <ul style="list-style-type: none"> Congruence of triangles <p>TRIANGLES</p> <ul style="list-style-type: none"> Congruence of Triangles Criteria for Congruence of Triangles Some properties of a Triangle 	<p>Chapter 5 – Introduction to Euclid's Geometry</p> <p>* Proof of the theorem - (ASA Congruence).</p>
<p>September 2020</p> <p>Chapter 7</p>	<p>TRIANGLES (Cont..)</p> <ul style="list-style-type: none"> Some more Criteria for Congruence of Triangles <p>REVISION & FIRST TERM EXAMINATION</p>	<p>* Triangle inequalities and relation between 'angle and facing side' inequalities in triangles</p>
<p>October 2020</p> <p>Chapter 8</p> <p>Chapter 10</p>	<p>QUADRILATERAL</p> <ul style="list-style-type: none"> Angle Sum Property of a Quadrilateral Types of Quadrilaterals Properties of a Parallelogram Another Condition for a Quadrilateral to be a Parallelogram The Mid-Point Theorem <p>ACTIVITY</p> <p>CIRCLES</p> <ul style="list-style-type: none"> Circles and its Related Terms : A Review Angle subtended by a chord at a point Perpendicular from the Centre to a Chord 	<p>Chapter 9 – Areas of Parallelograms and Triangles</p> <p>* There is one and only one circle passing through three given non-collinear points.</p>
<p>November 2020</p> <p>Chapter 10</p>	<p>CIRCLES (Cont..)</p> <ul style="list-style-type: none"> Equal chords and their distances from the centre Angle subtended by an arc of a circle Cyclic Quadrilateral <p>ACTIVITY</p>	<p>* If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle.</p>

Chapter 11	CONSTRUCTIONS <ul style="list-style-type: none"> •Basic Constructions • Some Constructions of Triangles 	*Construction of a triangle of given perimeter and base angles *Application of Heron’s Formula in finding the area of a quadrilateral.
Chapter 12	BRIDGE COURSE <ul style="list-style-type: none"> •Squares, square roots, Cubes and cube roots 	
Chapter 13	HERON’S FORMULA <ul style="list-style-type: none"> •Area of a Triangle – by Heron’s Formula 	
December 2020	SURFACE AREA AND VOLUME <ul style="list-style-type: none"> •Surface Area and Volume of a Cuboid and a Cube 	
January 2021	WINTER VACATION	
Chapter 13	SURFACE AREA AND VOLUME (Cont..) <ul style="list-style-type: none"> • Surface Area and Volume of a Right Circular Cylinder • Surface Area and Volume of a Right Circular Cone • Surface Area and Volume of a Sphere and Hemisphere 	*Histograms (with varying base lengths) * Frequency polygons. *Mean, median and mode of ungrouped data
Chapter 14	STATISTICS <ul style="list-style-type: none"> •Collection of Data • Presentation of Data • Graphical Representation of Data 	
Chapter 15	ACTIVITY PROBABILITY <ul style="list-style-type: none"> •Empirical Probability 	
	REVISION	
February 2021	REVISION & ANNUAL EXAM 2020-21	
March 2021		
