| BAGARIA BAL VIDYA NIKETAN |  |  |  |  |  |  |
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| LACHHMANGARH-SIKAR |  |  |  |  |  |  |
| SYLLABUS \& LESSON PLANNER 2022-23 |  |  |  |  |  |  |
| CLASS | IX |  |  |  |  |  |
| SUBJECT | Mathematics |  |  |  |  |  |
| TEACHER'S NAME | Praveen Saini |  |  |  |  |  |
| SYLLABUS |  |  |  |  |  |  |
| CH. NO. | NAME OF CHAPTE | WORKING DA | PERIOL | TOPIC | MONTH | WEEK |
| Unit No: II | Algebra:- <br> Polynomials, Linerar Equations in two variables | 21 | 27 | Coefficients of a polynomial, terms of a polynomial and zero polynomial. Degree of a polynomial. Constant, linear, quadratic and cubic polynomials. Monomials, binomials, trinomials. | April | 1 |
|  |  |  |  | Factors and multiples. Zeros of a polynomial. Motivate and State the Remainder Theorem with examples. Statement and proof of the Factor Theorem. Factorization of ax2 <br> $+b x+c, a \neq 0$ where $a, b$ and <br> c are real numbers, and of cubic polynomials using the Factor Theorem. |  | 2 |
|  |  |  |  | Introduction to the equation in two variables. Focus on linear equations of the type $a x+b y+c=0$ |  | 3 |
| Unit: V | Mensuration: | 17 | 27 | Area of a triangle using Heron's formula (without proof) | May | 1 |
|  | Surface areas \& volumes |  |  |  |  | 2 |
| Unit: V | Mensuration: <br> Area volumes | 9 | 9 | Surface areas and volumes of spheres (including hemispheres) and right circular cones | June | 1 |
| Revision for the Test consisting the syllabus completed till now |  |  |  |  | July | 1 |
|  |  |  |  |  | 2 |
| Unit : III | Coordinate Geometry |  |  | The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations. |  |  | $1 \& 2$ |


| $\begin{gathered} \star \\ \text { VI } \end{gathered}$ | Statistics and Probability | 23 | 36 | Bar graphs, histograms (with varying base lengths), and frequency polygons. | August | 3 \& 4 |
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| Unit: IV | Geometry: Intro. Of Euclid's geometry, Lines and Angles, Triangles, | 25 | 36 |  | September | 1 |
|  |  |  |  | adjacent angles so formed is 1800 and the converse. |  | 2 |
|  |  |  |  | (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence). |  | 3 |
|  |  |  |  | (Motivate) The sides opposite to equal angles of a triangle are equal |  | 4 |
| Syllabus break due to holidays and exam period in the month of October. |  |  |  |  |  |  |
| Unit: IV | Geometry: <br> Quadrilateral, Circles | 25 | 36 | (Prove) The diagonal divides a parallelogram into two congruent triangles. | Novemebr | 1 |
|  |  |  |  | (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal. |  | 2 |
|  |  |  |  | (Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse. |  | 3 |
|  |  |  |  | (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle. |  | 4 |
| Unit: IV | Geometry: <br> Quadrilateral, Circles | 21 | 27 | (Motivate) 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 | December | 1 |
|  |  |  |  |  |  | 2 |
|  |  |  |  |  |  | 3 |
| unit: I | Real Numbers | 24 | 18 | Review of representation of natural numbers, integers, and rational numbers on the number line. Rational numbers as recurring/ terminating decimals. Operations on real numbers | January | 1 |
|  |  |  |  | Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.) |  | 2 |
|  | Revision |  |  |  | February | 1 |
|  | Revision |  |  |  | March |  |

