| N. C. JINDAL PUBLIC SCHOOL, PUNJABI BAGH, NEW DELHI-110026, ANNUAL SYLLABUS, 2024-2025  Class-X Subject-Mathematics Subject Teacher (Prepared by): RR Designation: TGT |                     |  |                  |            |               |       |  |
|--|---------------------|--|------------------|------------|---------------|-------|--|
| Preferred Text Book  | Subject-Mathematics | Subject reacher(Prepared by): KK                               |                  | Des        | ignation: 1G1 | No of |  |
| /Material  | Chapter's Name      | Chapter Topic/Sub Topic  | Term             | StartDate  | End Date      | Pds.  |  |
| Mathematics  | REAL NUMBER         | Fundamental Theorem of Arithmetic - statement                  | 1                | 01-04-2024 | 06-04-2024    | 7     |  |
| Textbook for   | NEAL NOWIDER        | after reviewing work done earlier and after                    | <u> </u>         | 01 04 2024 | 00 04 2024    | ,     |  |
| Class X  |                     | illustrating and motivating through examples,                  |                  |            |               |       |  |
| NCERT Publication  |                     | Proofs of irrationality  | l <sub>i</sub>   |            |               |       |  |
| TVCERT T dollection  |                     | 1 10013 Of Infationality                                       |                  |            |               |       |  |
|  | POLYNOMIALS         | Definition, Zeros of a polynomial.Relationship between         |                  | 08-04-2024 | 19-04-2024    | 9     |  |
|  |                     | zeros and coefficients of quadratic polynomial.                |                  |            |               |       |  |
|  |                     | 4  |                  |            |               |       |  |
|  |                     |  |                  |            |               |       |  |
|  | QUADRATIC           | Standard form of a quadratic equation Solutions of Q.E         | ı                | 22-04-2024 | 26-04-2024    | 6     |  |
|  | EQUATIONS           | by factorization, and by using quadratic formula.              |                  |            |               |       |  |
|  |                     | Relationship between discriminant and nature of roots.         |                  |            |               |       |  |
|  |                     | Situational problems based on quadratic equations              |                  | 29-04-2024 | 03-05-2024    | 6     |  |
| Mathematics Lab  |                     |  |                  |            |               |       |  |
| Mannual Class IX&X   |                     |  |                  |            |               |       |  |
| Published by NCERT   | PAIR OF LINEAR      | Introduction to Pair of linear equations in two variables      |                  |            |               |       |  |
|  | EQUATIONS IN        | graphical method of their solution, consistency/inconsistency. | I                | 06-05-2024 | 10-05-2024    | 7     |  |
|  | TWO VARIABLES       |  |                  |            |               |       |  |
|  |                     | Algebraic conditions for number of solutions.                  |                  |            |               |       |  |
|  |                     | Solution of a pair of linear equations in two variables        |                  |            |               |       |  |
|  |                     | algebraically - by substitution, by elimination                |                  |            |               |       |  |
|  |                     | Simple situational problems.                                   |                  | 13-05-2024 | 17-05-2024    | 6     |  |
|  |                     |  |                  |            |               |       |  |
|  |                     |  |                  |            |               |       |  |
|  | INTRODUCTION TO     | T-ratios of an acute angle of a right-angled triangle.         | I                | 01-07-2024 | 06-07-2024    | 7     |  |
|  | TRIGONOMETRY        | Proof of their existence (well defined);                       |                  |            |               |       |  |
|  |                     | motivate the ratios whichever are defined at 0 and 90          |                  |            |               |       |  |
|  |                     | Values of the trigonometric ratios of 30, 45 and 60.           |                  |            |               | _     |  |
|  |                     | Relationships between the ratios.                              | I                | 08-07-2024 | 12-07-2024    | 6     |  |
|  |                     | Proof and applications of the identity sin2A + cos2A = 1.      |                  |            |               |       |  |
|  |                     | Only simple identities to be given.                            |                  |            |               |       |  |
|  | COORDINATE          | Positional Composite of according to according                 |                  | 15 07 2024 | 20.07.2024    |       |  |
|  | COORDINATE          | Review: Concepts of coordinate geometry,                       | I                | 15-07-2024 | 20-07-2024    | 6     |  |
|  | GEOMETRY            | graphs of linear equations.                                    |                  | 22.07.2024 | 26.07.2024    |       |  |
|  |                     | Distance formula. Section formula (internal division).         |                  | 22-07-2024 | 26-07-2024    | 6     |  |
|  |                     |  |                  |            |               |       |  |
|  |                     |  |                  |            |               |       |  |
|  |                     |  | -                |            |               |       |  |
|  | TRIANGLES           | Definitions, examples, counter examples of similar triangles.  | <del>  .  </del> | 29-07-2024 | 03-08-2024    | 7     |  |

|                                | Proof of Basic Proportionality theorem.Statement of  |              |            |            |    |  |
|--------------------------------|--|--------------|------------|------------|----|--|
|                                | converse.Related questions   |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                | Criterion of simalarity and questions based on them.   | I            | 05-08-2024 | 09-08-2024 | 6  |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| STATISTICS                     | Introduction, Mean of grouped data   | I            | 12-08-2024 | 17-08-2024 | 6  |  |
|                                |  |              |            |            |    |  |
|                                | median and mode of grouped data  | 1            | 20-08-2024 | 23-08-2024 | 5  |  |
|                                | (bimodal situation to be avoided).   |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| PROBABILITY                    | Classical definition of probability.   | Ti Ti        | 27-08-2024 | 30-08-2024 | 5  |  |
|                                | Simple problems on finding the probability of an event   |              |            |            |    |  |
|                                | , production of the production |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| Revision                       | Revision for Half yearly Examination   | <del> </del> | 02-09-2024 | 11-09-2024 | 9  |  |
| Nevision                       | Revision for train yearly Examination  | - '          | 02 03 2024 | 11 03 2024 |    |  |
| ARITHMETIC                     | Introduction,Basic Concepts,Derivation of the nth terms  | <del> </del> | 13-09-2024 | 27-09-2024 | 13 |  |
| PROGRESSIONS                   | introduction, basic concepts, between or the nur terms   | - "          | 13-03-2024 | 27-03-2024 | 13 |  |
| PROGRESSIONS                   |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| ARITHMETIC                     | Sum of first n terms and their application in  |              | 30-09-2024 | 05-10-2024 | 6  |  |
| PROGRESSIONS                   |  | - ''         | 30-09-2024 | 05-10-2024 | 0  |  |
| PROGRESSIONS                   | solving daily life problems.   |              |            |            |    |  |
| CIRCLEC                        | Tangant to a simple at a sint of southert  |              | 07.10.2024 | 10 10 2024 | 0  |  |
| CIRCLES                        | Tangent to a circle at, point of contact   | II           | 07-10-2024 | 19-10-2024 | 9  |  |
|                                | Theorems and questions based on them.  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| 00145 4 85 : : 0 : - : 0 : : 0 |  | <del> </del> | 04.45.555  | 0= 40 000  |    |  |
| SOME APPLICATIONS              | Simple problems on heights and distances.  | II           | 21-10-2024 | 25-10-2024 | 6  |  |
| OF TRIGONOMETRY                | Angles of elevation / depression should be only 30°, 45°, and 60°.   |              | 04-11-2024 | 08-11-2024 | 5  |  |
|                                |  |              |            |            |    |  |
|                                |  |              |            |            |    |  |
| <br>AREAS RELATED              | Area of sectors and segments of a circle. Problems based on  | II           | ļ          |            |    |  |
| TO CIRCLES                     | areas and perimeter /circumference of the above e figures. For   |              | 11-11-2024 | 16-11-2024 | 6  |  |
|                                | area of segment of acircle, problems should be restricted  |              |            |            |    |  |
|                                | to central angle of 60°, 90° and 120° only. Revision   |              |            |            |    |  |
|                                |  |              |            |            |    |  |
|                                | Pre Board-1  |              | 18-11-2024 | 02-12-2024 |    |  |
|                                |  |              |            |            |    |  |
| <br>SURFACE AREAS              | Surface areas and volumes of combinations of any two of  | II           | 03-12-2024 | 07-12-2024 | 7  |  |

| AND VOLUMES           | the following: cubes, cuboids, spheres,         |            |            |   |  |
|-----------------------|---|------------|------------|---|--|
|                       | hemispheres and right circular cylinders/cones. |            |            |   |  |
|                       |   |            |            |   |  |
| REVISION              | Revision  | 09-12-2024 | 12-12-2024 | 5 |  |
|                       | Pre- Board 2 Examination                        | 16-12-2024 | 30-12-2024 |   |  |
|                       |   |            |            |   |  |
| Prepared by: RR       |   |            |            |   |  |
| Sub. Co-ordinator-KK. |   |            |            |   |  |

| NO | PT/HALF YEARLY/ | PRE   Chapter/Topic                      | Max. Marks |
|----|-----------------|--|------------|
|    |                 |  |            |
|    | 1 PT1           | REAL NUMBERS                             | 12         |
|    |                 | POLYNOMIALS                              | 8          |
|    |                 |  |            |
|    |                 | TOTAL                                    | 20         |
|    |                 |  |            |
|    | 2 PT2           | PAIR OF LINEAR EQUATION IN TWO VARIABLES | 12         |
|    |                 | TRIGONOMETRY                             | 8          |
|    |                 |  |            |
|    |                 | TOTAL                                    | 20         |
|    |                 |  |            |
|    | 3 PT3           | QUADRATIC EQUATIONS                      | 8          |
|    |                 | TRIANGLES                                | 10         |
|    |                 | COORDINATE GEOMETRY                      | 9          |
|    |                 | STATISTICS                               | 8          |
|    |                 | PROBABILITY                              | 5          |
|    |                 | TOTAL                                    | 40         |
|    |                 |  |            |
|    | 4 PREBOARD 1    | NUMBER SYSTEM                            | 6          |
|    |                 | ALGEBRA                                  | 20         |
|    |                 | COORDINATE GEOMETRY                      | 6          |
|    |                 | GEOMETRY                                 | 15         |
|    |                 | TRIGONOMETRY                             | 12         |
|    |                 | MENSURATION(AREA RELATED TO CIRCLES)     | 10         |
|    |                 | STATISTICS AND PROBABILITY               | 11         |
|    |                 | TOTAL                                    | 80         |
|    |                 |  |            |
|    | 5 PREBOARD 2    | NUMBER SYSTEM                            | 6          |
|    |                 | ALGEBRA                                  | 20         |
|    |                 | COORDINATE GEOMETRY                      | 6          |
|    |                 | GEOMETRY                                 | 15         |
|    |                 | TRIGONOMETRY                             | 12         |
|    |                 | MENSURATION                              | 10         |
|    |                 | STATISTICS AND PROBABILITY               | 11         |
|    |                 | TOTAL                                    | 80         |