

RBSE Class 9 Maths Reduced Portion 2021

Board of Secondary Education Rajasthan, Ajmer

Subject : Mathematics

Subject Code : 09

Class : 9th

Revised Syllabus for Exam 2021

Scheme of Examination of this subject is as follows :-

Question Paper	Time (Hours)	Marks for the Paper
One-Paper	3.15	100

Max Marks: 100

Unit	Name of Unit	Marks
1	Number Systems	08
2	Algebra	24
3	Coordinate Geometry	08
4	Geometry	32
5	Mensuration	18
6	Statistics and Probability	10
	Total	100

UNIT 1: NUMBER SYSTEMS

8

1. Real Numbers

Irrational numbers , Real numbers and their decimal expansion , Operations on real numbers, Laws of exponents for real numbers.

UNIT 2: ALGEBRA

24

1. Polynomials

Definition of a polynomial in one variable, Zeros of a polynomial , Factorization of polynomials, algebraic identities –

$$\begin{aligned}(x+y)^2 &= x^2 + 2xy + y^2, & (x-y)^2 &= x^2 - 2xy + y^2 \\ x^2 - y^2 &= (x+y)(x-y), & (x+y)^3 &= x^3 + y^3 + 3xy(x+y) \\ (x-y)^3 &= x^3 - y^3 - 3xy(x-y)\end{aligned}$$

and application of these in the factorization of polynomials.

2. Linear Equations in Two Variables

Linear equations , Solutions of linear equations , Equations of lines parallel to x- axis and y-axis.

UNIT 3: COORDINATE GEOMETRY

8

1. Coordinate Geometry

Coordinate system, Plotting of a point in a plane when its coordinates are given.

UNIT 4: GEOMETRY

32

1. Lines and Angles

Fundamental terms and definitions, Intersecting and non-intersecting lines, Pair of angles, Parallel lines and transversal line, Property of addition of angles of a triangle.

2. Triangles

Congruence of triangles, Criteria of congruency of triangles- Side-Angle-Side (SAS) and Side-Side-Side (SSS), Some properties of a triangle.

3. Quadrilaterals

Property of addition of angles of a quadrilateral, Types of quadrilateral, Properties of a parallelogram.

4. Circles

Circle and its relating terms, Angle at point subtend by a chord, Perpendicular from center on a chord, Angle subtend by an arc of a circle- 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.

5. Constructions

Fundamental constructions- Construction of bisectors of a given angle, Construction of perpendicular bisector of line segments; Some constructions of triangles – Construction of a triangle whose base, base angle and sum of its two sides are given.

UNIT 5: MENSURATION

18

1. Areas

Area of a triangle using Heron's formula .

2. Surface Areas and Volumes

Surface areas of cuboid and cube, Volume of a cube and a cuboid.

UNIT 6: STATISTICS and PROBABILITY

10

1. Statistics

Presentation of data, Diagrammatic representation of data (bar graphs).

Prescribed Book :

Mathematics (Class 9) Board of Secondary Education Rajasthan, Ajmer.