Adv.M.N.Deshmukh Art's Science & Commerce College, Rajur

Annual Planning for the Year 2022-2023

F. Y. BSc. Mathematics Paper-I

Sr. No.	Month	Total Lectur	Name of the Topic
	Term-I		Algebra
1	June 2022	08	**Ch-1 Sets Relation and Function.** **1.1** Sets , Relation , Equivalence relation , Equivalence class and Partition set. **1.2** Function, basic terminology , Types of function , Inverse function , composition function.
2	Jully 2022	10	**Ch.2 Divisibility theory in the Integer.** 2.1 Mathematical Induction , Well ordering principle. 2.2 The division algorithm , The greatest common divisor, Euclid's Lemma, The least common multiple, The Euclidean Algorithm.
3	Aug 2022	08	**Ch. 3 Primes and the theory of Congruence.** 3.1 The fundamental number of arithmetic, Primes numbers , Euclid's lemma. 3.2 The theory of congruence. 3.3 Fermat's theorem.
4	Sep 2022	06	**Ch.4 Complex Number.** 4.1 Sum and Product , Basic Algebraic Properties, Moduli , Complex conjugate, Exponential form , Product and quotients , De- Moivre's theorem.
5	Oct 2022	04	4.2 Roots of complex numbers , The nth root of unity Region in complex plane.
	Term-		Geometry

	II		
6	Dec 2022	10	**Ch. 1 Analytical Geometry of Two Dimension.** 1.1 Change of axes : Rotation and translation. 1.2 Conic section : General equation of second degree. 1.3 Reduction to standard form, center of conic, nature of conic.
7	Jan 2023	10	**Ch. 2 Plane.** 2.1 Direction cosines direction ratios, Equation of plane, Normal form , Transformation to Normal form, Plane passing through three non collinear pointes , Intercept form , Angle between two planes.
8	Feb 2023	08	**Ch. 3 Lines in three dimension.** 3.1 Equation of line in symmetrical and unsymmetrical form, Line passing through two points. 3.2 Perpendicular distance of point from plane, Condition for two lines to be perpendicular.
9	Mar 2023	08	**Ch-4 Sphere.** 4.1 Equation of sphere in different forms, Plane section of sphere. 4.2 Equation of circle, Sphere passing through a given circle. 4.3 Intersection of sphere and line, Equation of tangent plane to sphere.