

Lesson Plan
Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Odd Semester (Semester-I)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-I

Subject: Mathematics

Paper-I: Plane geometry

Name of the Teacher: Dr. Swati Sidana, Dr Sonica

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
July	24.07.2023	31.07.2023	Transformation of axes in two dimensions: Shifting of origin, rotation of axes, invariants.	Syllabus, Examination pattern discussed, Doubt Session.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.08.2023				
August	01.08.2023	31.08.2023	Pair of Straight Lines: Joint equation of pair of straight lines and angle between them, Condition of parallelism and perpendicularity, Joint equation of the angle bisectors, Joint equation of lines joining origin to the intersection of a line and a curve.	Syllabus, Examination pattern discussed, Doubt Session.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.09.2023				
September	01.09.2023	30.09.2023	Circle: General equation of circle, Circle through intersection of two lines, tangents, normals, chord of contact, pole and polar, pair of tangents from a point, equation of chord in terms of mid-point, angle of intersection and orthogonality, power of a point w.r.t. circle, radical axis, co-axial family of circles, limiting points.	Doubt session, Assignments, revision of a few topics.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 03.10.2023				
October	03.10.2023	31.10.2023	Conic: General equation of a conic, tangents, normals, chord of contact, pole and polar, pair of tangents from a point, equation of chord in terms of mid-point, diameter. Conjugate diameters of ellipse and hyperbola	Doubt session, Assignments, Power Point Presentations.

Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.11.2023				
November	01.11.2023	18.11.2023	Special properties of parabola, ellipse and hyperbola, conjugate hyperbola, asymptotes of hyperbola, rectangular hyperbola. Identification of conic in general second degree equations.	Doubt session, Assignments, Power Point Presentations, Question papers discussed. Revision of a few topics
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 19.11.2023				
End semester Examination 27.11.2023 to 30.12.2023				

Lesson Plan

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh
Monthly Teaching Plans-Even Semester (Semester-IV)
Session – 2023-24

Department: Mathematics

Class: BA/BSc-I

Subject: Mathematics

Paper-I: Solid Geometry

Name of the Teacher: Dr Swati Sidana, Dr Sonica

Month	Date		Topics to be covered	Academic Activity to be Undertaken
	From	To		
January	09.01.2024	31.01.2024	Transformation of axes: Shifting of origin and rotation of axes. Sphere: Section of a sphere and a plane, spheres through a given circle, intersection of a line and a sphere, tangent line, tangent plane, angle of intersection of two spheres and condition of orthogonality, power of a point w.r.t. a sphere, radical axis, radical center, co-axial family of spheres, limiting points.	Syllabus, Examination pattern discussed, Doubt Session.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.02.2024				
February	01.02.2024	29.02.2024	Cylinder: Cylinder as a surface generated by a line moving parallel to a fixed line and through a fixed curve, different kinds of cylinders such as right circular, elliptic, parabolic and hyperbolic cylinders in standard forms, enveloping cylinders.	Doubt session, Assignments, revision of a few topics.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.03.2024				
March	01.03.2024	30.03.2024	Cone: Cone with a vertex at the origin as the graph of a homogeneous equation of second degree in x,y,z , cone as a surface generated by a line passing through a fixed curve and a fixed point outside the plane of the curve, reciprocal cones, right circular and elliptic cones, right circular cone as a surface of revolution obtained by	Doubt session, Assignments, Power Point Presentations.

			rotating the curve in a plane about an axis, enveloping cones.	
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.04.2024				
April	01.04.2024	22.04.2024	Conicoid: Equations of ellipsoid, hyperboloid and paraboloid in standard form. Reduction of second degree equation in three variables in standard form.	Doubt session, Assignments, Power Point Presentations, Question papers discussed. Revision of a few topics.
Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 23.04.2024				
End semester Examination 02.05.2024 to 05.06.2024				