Lesson Plan (2018-2019)

B. A (Prog) (Semester iii).

Analytical Geometry and Applied Algebra

Teacher: Mr. Basant Kumar Mishra **Workload : 5 lectures per week**

Referen ces:	1.Calculus,H.Anton,Birens and S.Davis, john Wiley and Sons,Inc. 2002.	
	2.Applied Combinatorics,A Tucker,John Waley & Sons,2003.	
Unit	**Week**	**Topics Covered**
1	Week-1 July 23-27,	Technique for sketching parabola with examples
	Week-2 July 30 - August 3,	Technique for sketching Ellipse with examples
2	**Week-3** August 6-10, 2	Technique for sketching hyperbola with examples
	Week-4 August 13-17,	Exercise problems
	Week-5 August 20-24,	Exercise problems continued,Doubt Class
3	**Week-6** August 27-31,	Test and Assignment,Reflection properties of parabola,ellipse,hyperbola
4	**Week-7** September 3-7	Application of Reflection property,Classification of quadratic equation
	Week-8 September 10	Rotation of axis second degree equations
	Week-9 September 17	Exercise problems,Rectangular coordinates in 3d
	Week-10 September 24	Spheres,Cylindrical surfaces cones.
	Week-11 October 1-5, 2	Vectors in coordinate system,Geometrical interpretation of vectors
5	**Week-12** October 8-12,	Dot product,Cross product and its geometrical properties

Week-13 October 22-26	Parametric equations of lines in planes	
Week-14 October 29 - November 2, 2018	Planes in 3d,Mathematical models for matching jobs,Spelling checker etc.	
Week-15 November 5-9	Latin Squares,Table for a finite group as a latin square	
Week-16 November 12-	Pitcher pouring puzzle,Final test and assignment submission.	