



Govt. Polytechnic Hamirpur (H.P.)

Lesson Planning (Theory)

Branch : Electrical Engg.

Semester : Second

Subject : Mathematics-II

Session : 27th January 2029- 29th May2025

Teacher: Subhash Chand

Class Room:

**Proposed Lesson Plan:**

Period:27/01/24 to 29/05/24				Total Lectures Planned: 76		
S. No.	Week	No. of Lectures	Chapter/ Unit Description	Detail of Contents	Reference Resources	Remarks
1	5th Jan.	4	Algebra	Introduction to Mathematics-II Introduction to determinants Elementary properties of determinants upto 3rd order Consistency of equations & Crammer's rule.  Algebra of matrices, Inverse of a matrix, Matrix inverse method to solve a system of linear equations in 3 variables.	R1,R2 & R3	
	1st Feb.	1				
	2nd Feb.	4				
	3rd Feb.	5				
2	4th feb.	5	Integral calculus	Simple Integration by substitution method,  by parts, by partial fractions  (for linear factors only).  Use of formulas: $\int_0^{\frac{\pi}{2}} \sin^n x dx$ $\int_0^{\frac{\pi}{2}} \cos^n x dx$ $\int_0^{\frac{\pi}{2}} \sin^n x \cos^m x dx$ Class Test -I  Applications of integration: Simple problem on evaluation of area bounded by a curve and axes.  Calculation of Volume of a solid formed by revolution of an area about axes.	R1,R2 & R3	
	5th Feb.	4				
	1st Mar.	1				
	2nd Mar.	4				
	3rd Mar.	4				
	4thMar.	5				
	5th Mar.	5				
3	1st April	4	Co-Ordinate Geometry	Equations of straight line in various standard forms (without proof), inter section of two straight lines, angle between two lines, Perpendicular distance formula.  General equation of a circle and its characteristics, To find the equation of a circle, given: Centre and radius, Class Test -II  Three points lying on it , Coordinates of end points of diameter.	R1,R2 & R3	
	2nd April	4				
	3rd April	2				
	4th April	5				

	5th April	1		Definition of conics (Parabola, Ellipse, Hyperbola) their standard Equations without proof.		
	1st May	3		Problems on conics when their foci, directrices and vertices are given.		
4	2nd May	4	Differential Equations	Solution of first order and first degree, differential equation by variable	R1,R2 & R3	
	3rd May	4		House Test		
	4th May	5		separable method (simple problems).		
	5th May	2		Revision of Whole syllabus.		

#### Reference Resources

- R1 Eagle Prakashan by Satish Kumar Sharma  
R2 Dr. RD Sharma Applied mathematics  
R3 B.S. Grewal Higher Engineering Mathematics

*Schand*  
29/01/2025

Signature of Teacher with Date

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29/01/2025

Signature of H.O.D. with Date