

# शासकीय पॉलीटेक्निक गरियाबंद



शासकीय पॉलीटेक्निक गरियाबंद

Subject : Basic Mathematics  
Semester : I<sup>st</sup>  
Session : 2025-26  
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## Detailed Teaching Plan

Lecture No.	Unit No.	Topics to be covered	Planned Date	Execution Date	Remarks
1	Unit 1 (08) <u>Algebra</u>	1.1. Determinant	01.08.2025	01.08.2025	
2		1.11 Concept and properties of determinants	02.08.2025	02.08.2025	
3		1.12. Solution of simultaneous equations in three unknowns by Cramer's rule	03.08.2025	18.08.2025	
4			04.08.2025	19.08.2025	
5		1.2 Matrices	18.08.2025	20.08.2025	
6		1.2.1 Algebra of Matrices	19.08.2025	21.08.2025	
7		1.2.2 Inverse of Matrices	20.08.2025	22.08.2025	
8		1.2.3. Solution of Simultaneous equations by matrix inversion	21.08.2025	23.08.2025	
9		method of order $3 \times 3$ <u>Differential Calculus</u> :-	22.08.2025	25.08.2025	
	Unit 2 (08)	2.1 Basic Trigonometry			
10		2.1.1 Multiple and Sub multiple angles	25.08.2025	27.08.2025	
11			27.08.2025	29.08.2025	
12		2.2 Functions and Limits	28.08.2025	30.08.2025	
13		2.2.1 Independent and dependent variable	29.08.2025	01.09.2025	



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14		2.22 Different Types of functions	01.09.2025	02.09.2025	
15		2.23 Concept of limit and its evaluation	02.09.2025	03.09.2025	
16		2.3 Differentiation of elementary functions	03.09.2025	04.09.2025	
17		2.31 Differentiation of elementary Algebraic, Trigonometric, Exponential and Logarithmic functions	04.09.2025	08.09.2025	
18			08.09.2025	09.09.2025	
19			09.09.2025	10.09.2025	
20		2.32 Differentiation of Sum, product, quotient of two functions	10.09.2025	12.09.2025	
21			12.09.2025	13.09.2025	
22		2.33 Differentiation of function of a function	15.09.2025	15.09.2025	
	Unit-3 (U1)	<u>Applications of Differential Calculus</u>			
23		3.1 Second order derivatives	16.09.2025	16.09.2025	
24		3.2 Equation of Tangent and Normal	17.09.2025	17.09.2025	

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25		3.2.1 Equation of Tangent and Normal for functions of one variable Only	18.09.2025	18.09.2025	
26			19.09.2025	19.09.2025	
27			20.09.2025	23.09.2025	
28		3.3 Maxima and Minima: -	23.09.2025	24.09.2025	
29		3.3.1 Maxima and minima for function of one variable only.	24.09.2025	25.09.2025	
30			25.09.2025	26.09.2025	
	<u>Unit-4</u> (10)	<u>Co-ordinate Geometry</u>			
31		4.1. Various forms of Straight lines	27.09.2025	27.09.2025	
32		4.1.1 Co-ordinate systems, slope	28.09.2025	06.10.2025	
33		point form, two point forms	03.10.2025	07.10.2025	
34		4.1.2 Distance b/w two points,	04.10.2025	08.10.2025	

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35		division of a line segment.	06/10/2025	09/10/2028	
36		4.13. Two points intercepts form General form,	07/10/2025	10/10/2025	
37		4.14. Perpendicular distance from a point on the line, $1^{st}$ distance b/w two $11^{th}$ lines	08/10/2028	11/10/2028	
38		4.2 Conic sections. 4.2.1 Definition, Standard form	09/10/2028	12/10/2025	
39		4.22 General equation	10/10/2028	08/11/2025	
40			11/10/2028	10/11/2025	
41		4.23 Center of and radius of a Circle	13/10/2025	11/11/2025	
42			14/10/2028	12/11/2025	

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43		4.24 Focus, axis, directrix, latus rectum and vertex of parabola and ellipse	15.10.2025	13.11.2025	
44			16.10.2025	14.11.2025	
45			25.10.2025	15.11.2025	
46			26.10.2025	17.11.2025	
47	Unit-5 (08)	Fundamentals of Statistics:  5.1 Frequency distribution and Central tendency	20.11.2025	20.11.2025	
48		5.11 Introduction, graphical representation of frequency distribution  5.12 Central tendency, mean, median, frequency distribution and mode.	20.11.2025	22.11.2025	
49			24.11.2025	24.11.2025	
50			25.11.2025	25.11.2025	
51			26.11.2025	26.11.2025	
52			27.11.2025	27.11.2025	

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53		5.2 Dispersion and Deviation.	28.11.2025	28.11.2025	
54		5.21 Measuru of dispersion.		29.11.2025	
55		5.22 Range, quartile deviation.	01.12.2025	02.12.2025	
56			<del>02.12.2025</del>	03.12.2025	
57		5.23 Standard deviation, root	03.12.2025	04.12.2025	
58		mean square deviation.	04.12.2025	08.12.2025	
59		5.3 Variance and Coefficient of	05.12.2025	09.12.2025	
		Variance a			
78		— Revision —	From 11-12-2025		Total 19 classes
		Unit - I to VI Revision	to		
		with papers	20-01-2026		
			Total	78 Classes	

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