Government Polytechnic Hamirpur (H.P.)
Lesson Planning (Theory)

Branch: Comp Engg.
Subject: Mathematics-I
Teacher: Dr. Kirandeep Bala

Semester: Ist
Session: Aug – Dec 2024
Theory

S. No.	No. of Lectures		Chapter/Unit Description	Detail of Contents	Reference Resources	Remarks
1	18	3rd, 4th, 5th week of August and 1st week of September	Trigonometry	concepts of angles and measurements of angles in degrees, grades and radians and their conversions	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				T-ratios of allied angles, sum, difference formulae and their applications, product formulae, multiple & submultiple angles, graphs of sinx, cosx, tanx, exp(x)	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
2	25	2nd, 3rd, 4th week of September and 1st and 2nd week of october	Differential calculus	Definition of functions , concept of limits, four standard limits	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				differentiation by definition of sinx, cosx, tanx, logx, exp(x)	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				differentiation of sum, product and quotient of functions, differentiation of function of a function	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				differentiation of trigonometric and inverse trigonometric functions, logarithmic differentiation, exponential differentiation	Applied Mathematics-I by B.D.Moudgil & P:C. Chopra	
				Applications of derivatives: maxima and minima, equation of tangent and normal to a curve , calculation of small errors and rate measures	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
3	34	3rd, 4th, 5th week of oct. and 2nd, 3rd,4th and 5th week of November	Algebra	Complex numbers: Definition, real and Imaginary part of complex number, conjugate, modulus & amplitude of a complex number, Addition, Subtraction, Multiplication and Division of	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				De-movier's theorem and its application Partial fractions (linear factors, repeated and non-repeated linear factors),	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				Permutations and combinations, Binomial theorem for positive integral index and any index, first and second binomial approximation with applications	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	

Kira

Signature of Teacher

(Dr Kirandeep Bala)

for Kira

Signature of HOD
Applied Sc. & Humanities

Government Polytechnic Hamirpur (H.P.)
Lesson Planning (Theory)

Branch: IT

Subject: Mathematics-I

Teacher: Dr. Kirandeep Bela

Semester: Ist

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3	34	3rd, 4th, 5th week of oct. and 2nd, 3rd,4th and 5th week of November	Algebra	Complex numbers: Definition, real and Imaginary part of complex number, conjugate, modulus & amplitude of a complex number, Addition, Subtraction, Multiplication and Division of	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				De-movier's theorem and its application Partial fractions (linear factors, repeated and non-repeated linear factors),	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				Permutations and combinations, Binomial theorem for positive integral index and any index, first and second binomial approximation with applications	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	

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Government Polytechnic Hamirpur (H.P.)
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Branch: Civil Engg.
Subject: Mathematics-I
Teacher: Dr. Kirandeep Bala

Semester: Ist
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3	33	3rd, 4th, 5th week of oct. and 2nd, 3rd,4th and 5th week of November	Algebra	Complex numbers: Definition, real and Imaginary part of complex number, conjugate, modulus & amplitude of a complex number, Addition, Subtraction, Multiplication and Division of	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
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Government Polytechnic Hamirpur (H.P.)
Lesson Planning (Theory)

Branch: Mech Engg.
Subject: Mathematics-I
Teacher: Dr. Kirandeep Bela

Semester: Ist
Session: Aug - Dec 2024
Theory:

S. No.	No. of Lectures		Chapter/Unit Description	Detail of Contents	Reference Resources	Rema rks
1	17	3rd, 4th, 5th week of August and 1st week of September	Trigonometry	concepts of angles and measurements of angles in degrees, grades and radians and their conversions	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
				T-ratios of allied angles, sum, difference formulae and their applications, product formulae, multiple & submultiple angles, graphs of sinx, cosx, tanx, exp(x)	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
2	24	2nd, 3rd, 4th week of September and 1st and 2nd week of october	Differential calculus	Definition of functions , concept of limits, four standard limits	Applied Mathematics-I by B.D.Moudgil & P.C. Chopra	
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