Name - Anju Gupta
Session — July - Dec 2024

Detailed Teaching Plan

Subject - Applied Maths-I
Semester - 1st Sem

Lecture No.	Unit No.	Topics to be covered	Planned Date	Execution Date	Remarks
08	I	Determinants, concept and properties of determinant	24.09.2024	24.09.2024, 26, 27, 30, 24, 3.10.24	
		solution of simultaneous equation in three unknown by cramer's rule	26.09.2024		
		Matrices	27.09.2024	04.10.24	
		Algebra of Matrices, Inverse of matrices	28.09.2024	15.10.24	
		solution of simultaneous equation by matrix inversion method of order 3x3	01.10.2024	17.10.24	
			03.10.2024	18.10.24	
			04.10.2024		
			08.10.2024		
08	II	Basic Trigonometry, multiple and sub multiple angles	10.10.2024	22.10.24	
		function and limit	11.10.2024	24.10.24	
		Independent and dependent variables	15.10.2024	25.10.24	
		Different type of function	17.10.2024	5.11.24, 6.11.24	
		concept of limit and its evaluation	18.10.2024	12.11.24	
			22.10.2024		

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Name - Anju Gupta
Session - July - Dec 2024

Detailed Teaching Plan

Subject - Applied Maths-I
Semester - 1st Sem

Unit No.	Lecture No.	Topics to be covered	Planned Date	Execution Date	Remarks
III	11	Diff. of sum, product, quotient of two function Diff. of fun of a function second order derivatives equation of tangent and Normal for function of one variable maxima and minima of one variable	24. 10.2024 25.10.24 29.10.24 01.11.24 05. 11.24 08.11.24	14.11.24 19.11.24 21.11.24 22.11.24 26.11.24 27, 11.24	
IV	10	straight lines distance and division b/w two curve Radius and centre of circle Parabola ellipse	12.11.24 14.11.24 16.11.24,19 22.11.24 26.28,29 03.12,24, 05 , 06, 10	28.11.24 29. 11.24 30.11.24 3.12.24,5 6.12.24,7 10, 12, 13, 14 17.12.24, 19, 20	
V	11	mean, median, mode measure of dispersion Range, quartile deviation standard and root mean deviation variance and coefficient of Variance	12, 13, 17.1224 19.12.24 20, 24.12.24 26, 27, 31.12.24 02.01.25	7.01.25, 8, 9 10.01.25, 11, 14, 16, 17 18.01.25, 23 25, 28, 30	

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H.O.D.

Reference

1.	Higher Engineering mathematics - B.S. Grewal
2.	Advanced engineering mathematics - H.K. Das
3.	Applied Mathematics - I - Vikas Shinde, Shashi S. Narvekar

Anju Gupta
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Name - Anju Gupta

Session - Jan-June 2025

Detailed Teaching Plan

Subject - Applied Math-II

Semester - IInd sem

Lecture No.	Unit No.	Topics to be covered	Planned Date	Execution Date	Remarks
(07)	IV	Numerical Solutions of equations:			
1		Introduction of algebraic and transcendental eq.	3.04.2025	3.04.25 4.04.25	
2	(1)	Bisection Method	4.04.2025 5.04.2025	5.04.2025 8.04.25	
2	(2)	Regula falsi method	11.04.2025 12.04.2025	9, 11, 12.0425	
2	(3)	Newton Raphson method	17.04.25 19.04.25	17.19, 21.0425	
(12)	V	Newmerical Integration:			
1		Introduction to Numerical integration	24.04.25	24.04.25	
3	(1)	Trapezoidal Rule	25, 26, 04.25 , 01.05.25	25.26, 30. 04.25	
4	(2)	Simpson's one third Rule.	2, 3, 8, 9.05.25	01, 3.05.25	
4	(3)	Simpson's three eight Rule.	10, 15, 16, 17.05.25	03.05.25	
(07)	I	Integral calculus:			
1		Simple Integration Rule and standard fun. Method of Integration:	22.05.25	05.05.25, 6, 7, 8.05.25 09.05.25, 06 , 05.25	
2	(1)	Integration by substitution	23.05.25 29.05.25	23.05.25 24.05.25	
2	(2)	Integration by parts	30.05.25 31.05.25	29, 30, 31. 05.25	
2	(3)	Integration by Partial fun	05.06.25, 06.06.25	19, 20, 21, 26, 27 28.06.25	

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Name - Anju Gupta

Session - Jan-June 25

Detailed Teaching Plan

Subject - Applied Maths III

Semester - IInd sem

Lecture No.	Unit No.	Topics to be covered	Planned Date	Execution Date	Remarks
(11)	II	Application of Integral Calculus:			
2		Definite Integration	7.06.25, 12.06.25	03.07.25, 4,5.07.25	
1		simple example	13.06.25	9,10.07.25	
2		Properties of definite integral	14.06.25, 19.06.25	11,12.07.25	
3		Application of Integration	20.06.25, 21,26.06.25	17,18,19.07.25	
	(1)	Area Under the curve		25.07.25	
3	(2)	Area b/w two curve	27.06.25, 28.06.25, 03.07.25	26.07.25	
(11)	III	Differential equation of first order and first degree:			
1.		concept of differential equation	04.07.25	31.07.25	
1		Order, degree and formation of diff. eq.	05.07.25	01.08.25	
1.		diff. equation solution of diff. equation	10.07.25	01.08.25	
1		Variable separable form	11.07.25	2.08.25	

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Name - Anju Gupta
Session - Jan - June 25

Detailed Teaching Plan

Subject - Applied Maths-II I
semester - II nd sem

Lecture No.	Unit No.	Topics to be covered	Planned Date	Execution Date	Remarks
4		Homogeneous Diff. equation	11,12,17, 18,07,2025	7.08.25	
3		Linear diff. equation	19/07/25, 25.26/07/25	14.08.25	

H.O.D.

Reference

1.	Higher Engineering mathematics - B.S. Grewal
2.	Advanced engineering mathematics - H.K. Das
3.	Applied mathematics - II - Vikas shinde & Shashi's Narayan

Anju Gupta
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Name - Anju Gupta
Session - July - Dec 2024

Detailed Teaching Plan

Subject - B.N.C.S.
Semester - 1st Sem

Unit No.	Practical No. Lecture and Lab	Topics to be covered	Planned Date	Execution Date	Remarks
I	11	Energy source: conventional and non-conventional energy source Hybrid energy renewable energy source	24,09.24, 26,28,04/10 /25,3,4,5/ /10/24	24.09.24, 26,28,27, 04/10/24,03, 04,05,17,18 19/10/24	
II	11	Solar energy: Solar radiation, solar air heaters, Storage of solar energy, solar water heaters, Photo Voltaics, solar street lights.	17,18,19,22, 23,24,~~26~~/ 10/24,29/ 10/24	22,24,26, 9/11/24,12, 14,19,21, 23,26,28	
III	11	wind energy: Principle of wind energy conversion, Basic components wind mill components.	30,7,12,14, 19,26,28, 23/11/24	23,26,28, 30,31, 3/12/24,5, 6,7,13/14 /12/24	
IV	11	Energy from Biomass: Biomass conversion technologies, Biomass generation plants.	26,28,29, 30/11/24,03/ 12/24,05/12/24 ,7,10,14,17	17,18,19,20, 25,31,02/01/25 ,1/01/25,4 7,9,10,11,14,	
V	10	Geothermal, micro hydel, ocean thermal energy conversion and Tidal energy	19,31/12/24 2/01/25,7,14/6 23,04/02/25, 06,7,13/14,15	16,17,18,21, 23,24,25,28 01/02/25,4,8 ,14/02/25	

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Reference

1.	Non conventional energy Sources - G D RAI
2.	Non-conventional sources of energy - S.S.L. PATEL

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Name- Anju Gupta

Session - Jan - June 2025

Detailed Teaching Plan

Subject - B.N.C.S

Semester - II nd Sem

Unit No.	Practical No. Lecture and Lab	Topics to be covered	Planned Date	Execution Date	Remarks
I	11	Energy source: conventional and non-conventional energy source Hybrid energy renewable energy source	03/04/25, 05/04/25 12/04/25 17/04/25 19/04/25 24/04/25	03.04.25, 5, 12, 17, 19, 24, 26, 04/05/25 03, 08, 09, 17, 05/25	
II	11	Solar energy: Solar radiation, solar air heaters, Storage of solar energy, solar water heaters, Photo Voltaics, solar street lights.	26/04/25 01/05/25 03/05/25 08/05/25	24, 29, 31, 19.06.25, 21, 26, 28, 30/7/25 , 5, 10.07.25	
III	11	wind energy: Principle of wind energy conversion, Basic components wind mill components.	9/05/25 17/05/25 24/05/25 29/05/25 31/05/25	12.07.25, 17, 19, 26. 31/07/25	
IV	11	Energy from Biomass: Biomass conversion technologies, Biomass generation plants	19/06/25 21/06/25 26/06/25 28/06/25	02/08/25 7/08/25	
V	10	Geothermal, micro hydel, ocean thermal energy conversion and Tidal energy	03/07/25 05/07/25 10/07/25 12/07/25 17/07/25 19/07/25 26/07/25	14/08/25	

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Reference

1.	Non-conventional energy Sources - G D RAI
2.	Non-conventional sources of energy - S. S. L PATEL

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