Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
Department of Mathematics

Curricular Relevance: Course outcomes with relevance to Local, Regional, National, Global needs U. G. (2024-25)

Sr. No.	Name of the Course	Course Code	Year of Introduction	COs and PSOs with relevance to local/ regional needs	COs & PSOs with relevance to national needs	COs & PSOs with relevance to global needs
B. Sc. I Mathematics (Newly Introduced in 2024-25)					
1	Basic Algebra	DSC03MAT11	2024-25		CO1: Employ De-Moivre's theorem	
2	Calculus	DSC03MAT12	2024-25		CO3: Understand the consequences of mean value theorems for differentiable functions	
3	Differential Equations-I	DSC03MAT21	2024-25		CO1: Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations.	CO1: Learn various techniques of getting exact solutions of solvable first order differential equations and linear differential equations.
4	Discrete Mathematics	DSC03MAT22	2024-25		CO1: Analyse the logical structure of statements symbolically including the proper use of logical connectives, predicates, and quantifiers.	CO4: Acquire the basic knowledge of graphs namely vertex, edge, special types of graphs, isomorphic graphs, matrix representation of graphs.
B. Sc. II Mathematics (Newly Introduced in 2024-25)					
1	Multivariable Calculus	DSC03MAT31	2024-25	CO4: Understand concept of vector integration to transform line integral to surface integral surface to volume integral and vice versa		
2	Integral Calculus	DSC03MAT32	2024-25	CO4: Use the Knowledge of double and triple integral integrals for finding area and volume.	CO1: Acquire the information about beta, gamma function and evaluate it in various problems	CO4: Use the Knowledge of double and triple integral integrals for finding area and volume.

					CO4: Use the Knowledge of double and triple integral integrals for finding area and volume.	PO: To develop scientific outlook with respect to science subject
3	Calculus of Multiple Variable	MIN03MAT31	2024-25	CO4: Understand concept of vector integration to transform line integral to surface integral surface to volume integral and vice versa		
4	Calculus of Integrable functions	MIN03MAT32	2024-25	CO4: Use the Knowledge of double and triple integral integrals for finding area and volume.	CO1: Acquire the information about beta, gamma function and evaluate it in various problems CO4: Use the Knowledge of double and triple integral integrals for finding area and volume.	CO4: Use the Knowledge of double and triple integral integrals for finding area and volume. PSO: To develop scientific outlook with respect to science subject
5	Discrete Mathematics	DSC03MAT41	2024-25		CO3: Formulate Recurrence relations to solve problems involving an unknown sequences	CO3: Formulate Recurrence relations to solve problems involving an unknown sequences
6	Integral Transform	DSC03MAT42	2024-25		CO4: Apply the knowledge of Laplace, Fourier transforms and Finite Fourier transforms in finding the solutions of differential equations	CO4: Apply the knowledge of Laplace, Fourier transforms and Finite Fourier transforms in finding the solutions of differential equations
7	Graph Theory and Recurrence Relations	MIN03MAT41	2024-25		CO3: Formulate Recurrence relations to solve problems involving an unknown sequences	CO3: Formulate Recurrence relations to solve problems involving an unknown sequences
8	Laplace and Fourier Transformations	MIN03MAT42	2024-25		CO4: Apply the knowledge of Laplace, Fourier transforms and Finite Fourier transforms in finding the solutions of differential equations	CO4: Apply the knowledge of Laplace, Fourier transforms and Finite Fourier transforms in finding the solutions of differential equations

				B. Com. I Mathematics (Newly Introduced in 2024-25)		
1	Business Mathematics I	OEC02MAT11	2024-25		CO1: Familiarize concept of series, different types of interest and can solve respective examples. CO4: Solve the examples using different method of L.P.P.	CO2: Familiarize concept of series, different types of interest and can solve respective examples.
2	Business Mathematics II	OEC02MAT21	2024-25	CO1: Explain concepts of permutation and combinations and can solve examples on it	CO4: Identify and select procedure for various Assignment and transportation problems	

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ESTD
JUNE
1964

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