"Dissemination of Education for Knowledge, Science and Culture"
-Shikshanmaharshi Dr. Bapuji Salunkhe
Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(An Empowered Autonomous Institute)
Department of Mathematics

Content with Focus on Employability, Entrepreneurship, Skill Development U. G. 2024-25

Sr. No.	Name of the Course	Course Code	Year of Introduction	Content with focus on employability	Content with focus on entrepreneurship	Content with focus on skill development
B. Sc. I Mathematics (Newly Introduced in 2024-25)						
1	Basic Algebra	DSC03MAT11	2024-25	Employ De- Moivre's theorem		De- Moivre's theorem Employ
2	Calculus	DSC03MAT12	2024-25	Mean Value theorem: Lagrange's mean value theorem, Rolle's Theorem		Mean Value theorem: Lagrange's mean value theorem, Rolle's Theorem
3	Differential Equations-I	DSC03MAT21	2024-25	Linear differential equations with constant coefficients: Auxiliary equation, Complementary function		Orthogonal trajectories
4	Discrete Mathematics	DSC03MAT22	2024-25	Propositional Calculus: Predicates and Quantifiers, Rules of Inference. Graph theory		Graphs and Operations on Graph
B. Sc. II Mathematics (Newly Introduced in 2024-25)						
1	Multivariable Calculus	DSC03MAT31	2024-25	Application of Jacobian Gradient, Divergence and Curl of vector, Vector identities		Jacobian: Curl, Gradient, Divergence
2	Integral Calculus	DSC03MAT32	2024-25	Double and triple integral, Fourier series expansion of elementary functions		Beta and Gamma function, Centre of gravity

3	Calculus of Multiple Variable	MIN03MAT31	2024-25	Application of Jacobian Gradient, Divergence and Curl of vector, Vector identities		Jacobian: Curl, Gradient, Divergence
4	Calculus of Integrable functions	MIN03MAT32	2024-25	Double and triple integral, Fourier series expansion of elementary functions		Beta and Gamma function, Centre of gravity
5	Discrete Mathematics	DSC03MAT41	2024-25	Recurrence relation, Generating Functions, Graph Theory and Paths and Circuits		Recurrence relation, Generating Functions,
6	Integral Transform	DSC03MAT42	2024-25	Laplace Transform, Inverse Laplace Transform, Fourier Transform		
7	Graph Theory and Recurrence Relations	MIN03MAT41	2024-25	Recurrence relation, Generating Functions, Graph Theory and Paths and Circuits		Recurrence relation, Generating Functions,
8	Laplace and Fourier Transformations	MIN03MAT42	2024-25	Laplace Transform, Inverse Laplace Transform, Fourier Transform		
B. Com. I Mathematics (Newly Introduced in 2024-25)						
1	Business Mathematics I	OEC02MAT11	2024-25	Linear Programming Problem		Compound Interest, Ratio, Percentage, A.P, G.P.
2	Business Mathematics II	OEC02MAT21	2024-25	Application of differentiation, Transportation and Assignment problem		Permutation and Combination