

M.V.R. DEGREE COLLEGE

(UG And PG Courses)

(Affiliated to Andhra University)
An Institution of Priyadarshini Educational Academy)
NAAC ACCREDITED COLLEGE

Dr.V.Rama Rao, M.A.,Ph.D.,
Secretary & Correspondent

Dr.A.Balakrishna,M.Sc.,Ph.D.,
Principal

Department Of Mathematics

Bachelor Of Science

REVISED CBCS

W.E.F 2020-2021

Code	Title of the paper	Course Out Comes
COURSE –I	Differential equations and differential equations problem solving sessions	CO 1: To find the linear differential equations. CO 2:To find the solutions of differential equations by using exact differential equations CO 3:Using orthogonal trajectories in Cartesian form and polar form of family curves. CO4:To solve homogenous differential equations using some rules CO5:Compute all the solutions of second and higher order linear differential equations with constant coefficients, linear equations with variable coefficients. CO6:To find complementary and particular functions using some methods i.e trigonometry ,polynomial, exponential functions CO7:To find complementary and particular functions using some methods i.e trigonometry ,polynomial, exponential with trigonometry functions CO8:Variation of parameters CO9:Compute all the solutions of Higher Order Linear Differential Equations with Constant Coefficients and non Constant Coefficients



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COURSE-II	Three diamsional solid geometry and three diamsional solid geometry problem solving session	<p>CO1:To find equation of plane in terms of its intercepts on the axis.</p> <p>CO2:To find combined equation of two planes, Orthogonal projectionon a plane</p> <p>CO3:Find the angle between planes, Bisector planes, Perpendiculardistance from a point to a plane, Image of a line on a plane, Intersection of two lines</p> <p>CO4:The condition that a given line may lie in a given plane</p> <p>CO5:Sets of conditions which determine a line</p> <p>CO6:The shortest distance between two lines</p> <p>CO7:Angle between a line and a plane</p> <p>CO8:Definition and equation of the sphere;</p> <p>CO9:Equation of a circle</p> <p>CO10:To find Power of a point; Tangent plane; Plane of contact; Polarplane; Pole of a Plane; Conjugate points; Conjugate planes.</p> <p>CO11:Definitions of a cone; vertex; guiding curve; generators</p> <p>CO12:Equation of the right circular cone with a given vertex; axis and semi-vertical angle</p> <p>CO13:Definition of a cylinder; Equation to the cylinder whose generators intersect a given conic and are parallel to a given line</p>
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COURSE-III	Abstract Algebra and Abstract Algebra Problem Solving Sessions	<p>CO1:To find set is a group or not with some conditions</p> <p>CO2:Binary Operation – Algebraic structure – semi group-monoid</p> <p>CO3:Write the definitions of Complex, subgroup and coset</p> <p>CO4:Prove some theorems Index of a subgroups of a finite groups– Lagrange's Theorem.</p> <p>CO5:Examples of Subgroups, cosets and union and intersection of Subgroups</p> <p>CO5: criterion for a subgroup to be a normal subgroup – intersection of two normal subgroups</p> <p>CO6:criteria for the existence of a quotient group</p> <p>CO7:Definition of homomorphism ,Isomorphism, aultomorphism , kernel of a homomorphism</p> <p>CO8:Fundamental theorem on Homomorphism and applications</p> <p>CO9:Theorems of permutation multiplication – Inverse of a permutation – cyclic permutations and Cayley's theorem.</p> <p>CO10:Definition Ring and their properties</p> <p>CO11:Definitions of Integral Domains,Fields</p> <p>CO12:Theorems on Integral Domains and Fields</p> <p>CO13:Definition of Characteristic of a Ring</p> <p>CO14:Theorems on Characteristic of a Ring</p>
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COURSE IV	Real Analysis & Real Analysis Problem Solving Sessions	<p>CO1:To understand about all numbers definitions.</p> <p>CO2:To learn about real numbers in absolute value, real line</p> <p>CO3:To know about theorems of convergence, limits and continuity</p> <p>CO4:Definition and Theorems on sequences</p> <p>CO5:To practice the test problems 1)P-test 2.) Cauchy's n^{th} root test or Root Test. 3.) D'-Alemberts' Test or Ratio Test.4.) Alternating Series – Leibnitz Test</p> <p>CO6:Know some theorems Cauchy's general principle of convergence, Absolute convergence and conditional convergence, semi convergence</p> <p>CO7:To use the definition of continuity</p> <p>CO8:To know the different types of Continuity</p> <p>CO9:To learn some examples and theorems</p> <p>CO10:To learn definition of differentiation by using continuity definition</p> <p>CO11:To do some problems by using differentiation function</p> <p>CO12:To know the Mean value Theorems</p> <p>CO13:To know Properties of integrable functions</p> <p>CO14:Fundamental theorem of integral calculus, integral as the limit of a sum</p>
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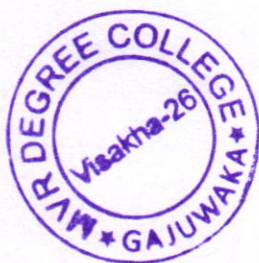
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COURSE V	Linear Algebra & Linear Algebra Problem solving sessions	<p>CO1:It is easily to highlight the need for linear algebra for physicists- quantum mechanics is entirely based on it</p> <p>CO2:To learn properties of vector spaces</p> <p>CO3:To write the properties of vector spaces</p> <p>CO4:To do some theorems and problems in Dimension of a Vector space, Dimension of a subspace, Quotient space and Dimension of Quotient space.</p> <p>CO5:To find rank and nullity in the matrix</p> <p>CO6:Using some properties in the linear transformations</p> <p>CO7: Give some examples in the linear transformations</p> <p>CO 8: It used operations in rows and columns in various methods.</p> <p>CO 9: It is used structural reasoning with entries of the matrix and orientation of the shape</p> <p>CO 10: To do some theorems are Bessel's inequality and Parseval's Identity</p>
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PRINCIPAL
M.V.R. DEGREE COLLEGE
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