**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2013-14

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

Differential equation of first order and first deree,Variable separable method,Homogeneous differential equation,Solving method ,Equations reducible to homogeneous form,Solving method

ABSTRCT ALGEBRA

Set,Finite set,Infinite set,Set of natural numbers,set of whole numbers,Set of all Integers,Set of all rational numbers,Set of all real numbers,Set of all irrational numbers,Set of all complex numbers,Fundamental operations,Properties of closure,commutative,distributive,associative,additive identity,multiplicative identity,multiplicative inverse

Relaions- reflexive,symmetric,transitive,antisymmetric relations

Functions- one one ,onto,identity function,constant function,range of a function,bijective function,inverse of a function,image of a function

REAL ANALYSIS

Sets of numbers,Set of all real numbers,Field axioms,Properties of real numbers,The order axioms,Properties of order relation ,Some important subsets of R , The set of natural numbers and the principle of induction,principle of astrong induction,well ordering principle,The set of integers,The set of rational numbers,The set of irrational numbers,The extended real number system,Modulus or absolute value of a real number,Finite subsets of R and aggregate,boundedness of subsets of R,The completeness of axiom,Dedekind’s axiom,Archimedian property,Integral part of a real number,Denseness of the real number system,Intervals, Neighbourhood of a point ,Limit point of a subset of R,Bolzano-Weierstrass theorem,Some properties of limit point of a set ,Open set,Properties of open set, Closed set properties of closed set,Countable and Un countable sets,properties of countable sets

**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2014-15

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

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Set,Finite set,Infinite set,Set of natural numbers,set of whole numbers,Set of all Integers,Set of all rational numbers,Set of all real numbers,Set of all irrational numbers,Set of all complex numbers,Fundamental operations,Properties of closure,commutative,distributive,associative,additive identity,multiplicative identity,multiplicative inverse

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REAL ANALYSIS

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**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2015-16

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

Differential equation of first order and first deree,Variable separable method,Homogeneous differential equation,Solving method ,Equations reducible to homogeneous form,Solving method

SOLID GEOMETRY

Introduction to coordinate geometry(Two dimensional)

Coordinates of a point in a plane,Distance between two points,Locus,Straight line,General equation of a straight line ,Different forms of straight line,Slope of a straight line,Perpendicular distance of a point from a srtraight line,image of a point about a straight line ,Straight line making intercepts on the coordinate axes,Equation of straight line parallel to a given straight line,Equation of straight line perpendicular to a given straight line,angle between straight lines, Pair of straight lines,Equation of pair of straight lines

Circle-centre,radius of acircle,euation of a circle,general form,parametric equation of a circle

Parabola-equation of parabola,parametric equation of a parabola

Ellipse- equation of ellipse,parametric euation of a ellipse

Hyperbola-equation of hyperbola,parametric equation of hyperbola

Polar coordinates-Notation of polar coordinates

**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2016-17

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

Differential equation of first order and first deree,Variable separable method,Homogeneous differential equation,Solving method ,Equations reducible to homogeneous form,Solving method

SOLID GEOMETRY

Introduction to coordinate geometry(Two dimensional)

Coordinates of a point in a plane,Distance between two points,Locus,Straight line,General equation of a straight line ,Different forms of straight line,Slope of a straight line,Perpendicular distance of a point from a srtraight line,image of a point about a straight line ,Straight line making intercepts on the coordinate axes,Equation of straight line parallel to a given straight line,Equation of straight line perpendicular to a given straight line,angle between straight lines, Pair of straight lines,Equation of pair of straight lines

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Parabola-equation of parabola,parametric equation of a parabola

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Hyperbola-equation of hyperbola,parametric equation of hyperbola

Polar coordinates-Notation of polar coordinates

**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2017-18

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

Differential equation of first order and first deree,Variable separable method,Homogeneous differential equation,Solving method ,Equations reducible to homogeneous form,Solving method

SOLID GEOMETRY

Introduction to coordinate geometry(Two dimensional)

Coordinates of a point in a plane,Distance between two points,Locus,Straight line,General equation of a straight line ,Different forms of straight line,Slope of a straight line,Perpendicular distance of a point from a srtraight line,image of a point about a straight line ,Straight line making intercepts on the coordinate axes,Equation of straight line parallel to a given straight line,Equation of straight line perpendicular to a given straight line,angle between straight lines, Pair of straight lines,Equation of pair of straight lines

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Parabola-equation of parabola,parametric equation of a parabola

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Hyperbola-equation of hyperbola,parametric equation of hyperbola

Polar coordinates-Notation of polar coordinates

**DANTULURI NARAYANA RAJU COLLEGE (A), BHIMAVARAM**

DEPARTMENTOF MATHEMATICS

SYLLABUS FOR BRIDGE COURSE

I B.Sc

 Academic year : 2018-19

DIFFERENTIAL EQUATIONS

Introduction to calculus, Differentiation,Integration

Few formulae of differentiation,integration, Solving methods

Differential equation,Ordinary differential equation,Partial differential equation

Order of a differential equation,degree of a differential equation

Formation of a differential equation,Solution of a differential equation,General solution of a differential equation,Partial solution of a differential equation,Singular solution of a differential equation

Differential equation of first order and first deree,Variable separable method,Homogeneous differential equation,Solving method ,Equations reducible to homogeneous form,Solving method

SOLID GEOMETRY

Introduction to coordinate geometry(Two dimensional)

Coordinates of a point in a plane,Distance between two points,Locus,Straight line,General equation of a straight line ,Different forms of straight line,Slope of a straight line,Perpendicular distance of a point from a srtraight line,image of a point about a straight line ,Straight line making intercepts on the coordinate axes,Equation of straight line parallel to a given straight line,Equation of straight line perpendicular to a given straight line,angle between straight lines, Pair of straight lines,Equation of pair of straight lines

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Parabola-equation of parabola,parametric equation of a parabola

Ellipse- equation of ellipse,parametric euation of a ellipse

Hyperbola-equation of hyperbola,parametric equation of hyperbola

Polar coordinates-Notation of polar coordinates