

**SRI CHANDRASEKHARENDRA SARASWATHI
VISWA MAHAVIDYALAYA**
(University established u/s 3 of UGC Act 1956)
Enathur, Kanchipuram – 631561.



DEPARTMENT OF MATHEMATICS



Profile
2019 – 20



**68th Jagadguru Shankaracharya of the Kanchi Kamakoti Peetham
Jagadguru Shri Chandrasekharendra Sarasawathi Mahaswamigal
(20 May 1894 – 8 January 1994)**

About the Department

1994	Year of establishment. Born as a component of Department of Science and Humanities.
1997	Ph.D., programme introduced
2009	M.Phil. (Full time & Part time) programme commenced.
2010	First batch of the M.Phil. students passed out.
2012	M.Sc. (Mathematics) programme commenced.
2013	The Department of Mathematics was separated from the Department of Science and Humanities and given independent status.
2013	Sankara Ganitha Sastra Parishad (Mathematical Association) was born.
2014	Highest Intake of Students for Part time M.Phil.
2015	First batch of the M.Sc., full time passed out.
2015	Proposal to start B.Sc., (Mathematics) programme was approved and Board of studies met to finalize the syllabus
2018	First Batch of B.Sc., students passed out

PREFACE / PREAMBLE

Mathematics is a major contributor in the engineering field and its principles involves in the calculation, compilation and graphical representation, design of experiments, statistical analysis and development and even in construction of nearly all the electrical, electronic, mechanical, structural and computing devices and systems. Continued research and development have led to better computing processes (like MATLAB) helping the mankind.

The Department of Mathematics at SCSVMV is as old as the Institute. Its impact in the institute and on society is easily established by noticing the alignment of the department's evolution with key events and academic advances in the University. Today, the Department of Mathematics of SCSVMV attracts and features an extraordinary rich diversity and quantity of talented individuals, with nearly 3 M.Phil. Scholars, 29 Post Graduate students and 24 faculty members at present. The impressive array of students makes the department as one of the largest in the University.

The department provides a broad knowledge base required for engineers in present global application scenario. It takes the maximum advantage of the latest technologies and market opportunities to enrich the learners with updated and advanced know-how of modern technology. The main focus is to concentrate on the significant modern developments in the application of engineering.

PREFACE / PREAMBLE

Mathematics is a major contributor in the engineering field and its principles involves in the calculation, compilation and graphical representation, design of experiments, statistical analysis and development and even in construction of nearly all the electrical, electronic, mechanical, structural and computing devices and systems. Continued research and development have led to better computing processes (like MATLAB) helping the mankind.

The Department of Mathematics at SCSVMV is as old as the Institute. Its impact in the institute and on society is easily established by noticing the alignment of the department's evolution with key events and academic advances in the University. Today, the Department of Mathematics of SCSVMV attracts and features an extraordinary rich diversity and quantity of talented individuals, with nearly 3 M.Phil. Scholars, 29 Post Graduate students and 24 faculty members at present. The impressive array of students makes the department as one of the largest in the University.

The department provides a broad knowledge base required for engineers in present global application scenario. It takes the maximum advantage of the latest technologies and market opportunities to enrich the learners with updated and advanced know-how of modern technology. The main focus is to concentrate on the significant modern developments in the application of engineering.

Contents

SL. NO.	TOPICS	PAGE NO.
1.	Vision and Mission Statement	1
2.	Objectives	3
3.	Academic Programmes Offered	4
4.	Syllabus	6
5.	Choice Based Credit System – For UG and PG (Mathematics) Programme	70
6.	Faculty Profile	76
7.	Remedial Measures	129
8.	Infrastructure Details	130
9.	Library Book Details	132
10.	Staff Work Load 2019 – 20	150
11.	Workshop / Seminars Participation	155
12.	Paper Presentation by Faculty Members	168
13.	Journal Publications by Faculty Members	173
14.	Outreach Activities by Faculty Members	175
15.	Awards Received by Faculty Members	180
16.	Ph.D. Viva Completed during 2019 – 20	181
17.	Student Placement Activities	182
18.	Research Colloquium	183
19.	Student Conference Presentation Details	184
20.	Programmes organized by the Department	185
21.	M.Phil. and M.Sc., Project Guide Allotment List	186

Vision & Mission

We envision our status to be a unique department of higher learning that offers quality education at an affordable cost in an inclusive manner, in the post-graduate and research level while imparting training in Mathematical software and Mathematical aptitude from time to time, to the Engineering students as well, thus helping the students to be up to date and job-worthy.

We hope to achieve this by producing quality mathematical research; providing teaching and extension services; upgrading the curriculum continuously; producing facilities for faculty development; and helping the development of mathematics faculty of other higher educational institutions by short term training programs, workshops seminars and lectures.

To influence the engineers with mathematical thinking and to develop the skill for applying the mathematical tricks to solve complicated engineering problems and to design mathematical models with a height involving global level technology.

Providing high quality graduate and professional programs of study with a wide spectrum of courses which attract the best students and cater to the mathematical needs of the university, industry and community alike.

Offering rigorous training to students so as to enable them to pursue higher studies or take up jobs that require a high degree of mathematical skill.

Involving graduates who have logical thinking and an aptitude for scientific research in frontier areas of mathematics and offering guidance up to doctoral level so as to support its own and other academic programmes of the university.

Striving to provide excellent teaching, research to serve the university and the community at large by enabling application of mathematics to other disciplines for which mathematical background is essential.

Creating interest in logics in mathematics, increasing the problem solving ability and to make the students aware of the application of mathematics in real-life problems, through the activities of the Mathematics Club (Sankara Ganitha Sastra Parishad).

Objectives

- ❖ To enhance the Laboratory based teaching to teach the application and theoretical concepts where ever possible, to ensure students volunteer themselves to learn the mathematical concepts with full interests.
- ❖ To increase the use of ICT tools like MATLAB, some open source soft wares and by way of using PPT, Video lectures and to use internet extensively to make the teaching - learning interesting.
- ❖ To continue follow modern pedagogy methods of teaching in the class rooms.
- ❖ To conduct national / international conferences so as to create avenues to learn from the experts from beyond our boundaries.
- ❖ To create a plan to subscribe to various journals in the relative field of study.
- ❖ To conduct training programs, workshops, lab programs to staffs and students of the various institutes in the region.

Academic Programs Offered

Graduate Courses	: B.Sc., (Mathematics)
Post Graduate Courses	: M.Sc., (Mathematics)
Research Programs	: M.Phil. (Full-Time) Ph.D. (Full-Time & Part-Time)

B.Sc., Programme

[Duration: 3 years / 6 semester]

Bachelor of Science [B.Sc.] is an Under-Graduate Program to have some basic familiarity and to put a concrete in the Mathematics with some abstract knowledge in the subject.

M.Sc., Programme

[Duration: 2 years / 4 semester]

Master of Science [M.Sc.] is a Post-Graduate Program for specializing in certain areas of Mathematics.

M.Phil., Programme

[Duration: 1 year / 2 semesters – Full Time]

Master of Philosophy [M.Phil.] is a one-year degree programme. The Department of Mathematics at SCSVMV is renowned for imparting state-of-the-art postgraduate education. We attract the bright students from the country who score very high ranks in their PG Degree and they are admitted through entrance examinations conducted by SCSVMV.

Ph.D. Programme

The Doctoral Degree programme in mathematics offers students the possibility of doing intensive research in an area of their choice. It has been our constant endeavor to provide the best facilities and working environment to our research students.

Current Student Details (2019 – 20)

Course	No. of Students
M.Phil	3
II M.Sc.,	19
I M.Sc.,	10
III B.Sc.,	56
II B.Sc.,	29
I B.Sc.,	29

SYLLABUS
MECHANICAL ENGINEERING
SEMESTER – I

MATHEMATICS – I – CALCULUS AND LINEAR ALGEBRA

(B.E. FIRST SEMESTER – MECHANICAL ENGINEERING)

(For the students admitted from 2018-19)

The objective of this course is to familiarize the prospective engineers with techniques in calculus , Multi-variable calculus and sequence and series. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics.

Unit I: Calculus

Evaluation of definite and improper integrals- Beta and Gamma functions and their properties - Applications of definite integrals to evaluate surface areas and volumes of revolutions.

Unit II: Numerical Methods

Solution of polynomial and transcendental equations – Bisection method-Newton-Raphson method-Regula-Falsi Method. Interpolation- Newton's forward and backward difference formulae- Interpolation with unequal intervals-Newton's divided difference and Lagrange's formulae-Numerical Differentiation.

Unit III: Sequences and Series

Convergence of sequence and series-tests for convergence- Comparison test-D'Alembert's ratio test- Raabe's test-Lagrange's test- Cauchy's root test-Fourier series: Half range sine and cosine series-Parseval's theorem.

Unit IV: Multivariable Calculus (Differentiation)

Limit-Continuity - Partial derivatives, total derivatives- Directional derivatives-Tangent plane and normal line- Maxima, minima and saddle points-Method of Lagrange multipliers-Gradient-Curl -Divergence.

Unit V: Matrices

Matrices: Rank of a matrix-rank-nullity theorem-System of linear equations-Symmetric matrices-Skew symmetric matrices- Orthogonal matrices; Eigen values and Eigenvectors- Cayley-Hamilton theorem-Diagonalization of matrices

Suggested Books

1. B.S. Grewal, “Higher Engineering Mathematics”, Khanna Publishers, 2000.
2. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, Pearson, 2002.
3. T. Veerarajan, Engineering Mathematics, McGraw-Hill, New Delhi, 2008.
4. B. V. Ramana, Higher Engineering Mathematics, McGraw Hill, New Delhi, 2010.
5. N.P. Bali and M. Goyal, A text book of Engineering Mathematics, Laxmi Publications,2010..
6. E. Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 2006.

SEMESTER – II

MATHEMATICS – II – CALCULUS ,ODE&COMPLEX VARIABLES

(B.E. SECOND SEMESTER – MECHANICAL ENGINEERING)

(For the students admitted from 2018-19)

The objective of this course is to familiarize the prospective engineers with techniques in multivariate integration, ordinary and partial differential equations and complex variables. It aims to equip the students to deal with advanced level of mathematics and applications that would be essential for their disciplines.

Unit I: Multivariable Calculus (Integration):

Multiple Integration: Double and Triple integrals (Cartesian) - Change of order of integration in double integrals - Problems on Green, Gauss and Stokes theorems.

Unit II: Ordinary Differential Equations of Higher Orders:

Operator D – Rules for finding complementary function – Rules for finding particular integral - Second order linear differential equations with variable coefficients: Cauchy-Euler equation - Method of variation of parameters.

Unit III: Partial Differential Equations of Higher Orders:

Definition of Partial Differential Equations- Formation of Partial differential equations, solutions of a Partial differential equation -Linear equations of the first order - Solution to homogenous and non-homogenous linear partial differential equations of second order by complementary function and particular integral method.

Unit IV: Complex Variable – Differentiation:

Differentiation - Cauchy-Riemann equations - Analytic functions - Harmonic functions, Finding Harmonic conjugate - Conformal mappings: $z+c$, $1/z$, cz , z^2 , $z+1/z$, e^z - Mobius transformations and their properties.

Unit V: Complex Variable – Integration:

Contour integrals: Cauchy-Goursat theorem (without proof) - Cauchy Integral formula (without proof) - Taylor's series - Laurent's series - Zeros of analytic functions –singularities – Residues - Cauchy Residue theorem (without proof) – Simple problems.

Suggested Books

1. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 36th Edition, 2010
2. Erwin kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons,2006.
3. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, 9th Edition, Pearson,Reprint, 2002.
4. W. E. Boyce and R. C. DiPrima, Elementary Differential Equations and Boundary Value Problems, 9th Edition, Wiley India, 2009.
5. S. L. Ross, Differential Equations, 3rd Ed., Wiley India, 1984.

6. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2008.

SEMESTER – III

ENGINEERING MATHEMATICS – III

(B.E. THIRD SEMESTER – MECHANICAL ENGINEERING)

(For students admitted in 2017-2021 batch)

To enable the students in applying mathematical methods in various engineering fields by making them to understand the method of Fourier series and Fourier Transform and Z-Transform.

Unit 1: Interpolation And Numerical Solution of Ordinary Differential Equations

Interpolation with equal intervals – Newton’s forward interpolation formula – Newton’s backward interpolation formula - Interpolation with unequal intervals: Lagrange’s interpolation formula, Newton’s divided difference formula. Picard’s method – Taylor series method - Modified Euler’s method – Runge’s method – Runge-Kutta method – Predictor-corrector methods: Milne’s method, Outline of applications of numerical solutions of ordinary differential equations in engineering.

Unit II: Fourier Series

Euler’s Formulae (Without Proof) – Condition for Fourier expansion – Functions having points of discontinuity – Change of interval – Expansions of even and odd functions – Half Range series – Parseval’s formula (without proof) – Root mean square value (without proof) – Typical waveforms (Definition Only): Square wave form, Saw toothed waveform, Modified saw toothed waveform, Triangular waveform, Half wave rectifier, Full wave rectifier - Outline of applications of Fourier series in engineering

Unit III: Laplace Transforms and Its Applications

Transforms of elementary functions : $1, t^n, e^{at}, \sin at, \cos at, \sinh at, \cosh at$ - Properties of Laplace transforms: Linearity Property, First shifting property, Change of scale property – Transforms of derivatives - Transforms of integrals - Multiplication by t^n - Division by t - Evaluation of integrals by Laplace transform - Inverse transforms: Method of partial

fractions – Other methods of finding inverse - Convolution theorem (Without proof) - Unit step function – Unit Impulse Function - Application to differential equations – Outline of applications of Laplace transforms in engineering.

Unit IV: Z – Transform and Its Applications

Standard z-transforms of $1, a^n, n^p$ – Linearity property – Damping rule – Shifting rules – Multiplication by n - Initial and final value theorems (without proof) – inverse z –transforms – Convolution theorem (without proof) – Convergence of z-transforms – Two sided z-transform – Evaluation of inverse z-transforms: Power series method, Partial fraction method, inversion integral method – Application to difference equations – Outline of applications of z-transform in engineering

Unit V: Fourier Transforms and Its Applications

Fourier integral theorem (without proof) - Fourier Sine and Cosine integrals – Complex form of Fourier integral - Fourier integral representation of a function - Fourier transform – Fourier sine and Cosine transforms – Properties of Fourier Transforms: Linear property, Change of scale property, Shifting property - Parseval’s identity for Fourier transforms (without proof) – Application of transforms to boundary value problems: Heat conduction, Vibrations of a string, Transmission lines.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006

2. Gerald C.F and Wheatley P.O, Applied Numerical Analysis, Addison-Wesley Publishing Company, 7th Edition, 2003

3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

SEMESTER – IV

ENGINEERING MATHEMATICS – IV**(B.E. THIRD SEMESTER – MECHANICAL ENGINEERING)****(For students admitted in 2017-2021 batch)**

To provide a definite idea about complex functions and their applications. To solve series solution of differential equation, higher order partial differential equations and difference equation.

Unit I: Analytic Functions

Limit and continuity of a complex function - Derivative of a complex function: Cauchy Riemann equations – Analytic functions – Harmonic functions - Orthogonal system – Applications to flow problems – Geometric representation of a complex function - Standard transformations: Translation, Magnification and rotation, Inversion and reflection, Bilinear transformation - Conformal transformation – Special conformal transformations : $e^z, z^2, z + \frac{1}{z}$ Outline of applications of analytic functions in engineering

Unit II: Complex Integration

Integration of complex functions – Cauchy's theorem (without proof) – Cauchy's integral formula (without proof) – Taylor's series (without proof)– Laurent's series (without proof) – Zeros and Singularities of an analytic function – Residues – Residue theorem (without proof) – Calculation of residues – Evaluation of real definite integrals: Integration around the unit circle, Integration around a small semi-circle, Integration around rectangular contours, Indenting the contours having poles on the real axis – Outline of applications of complex integration in engineering.

Unit III: Calculus of Variations

Functionals – Euler's Equation - Solutions of Euler's equation – Geodesics – Isoperimetric problems – Several dependant variables – Functionals involving higher order derivatives – Approximate solution of boundary value problems: Rayleigh-Ritz method.

Unit IV: Partial Differential Equations

Formation of partial differential equations – Solution of a partial differential equation – Equations solvable by direct integration – Linear equations of first order – Non-linear equations of the first order – Charpit's method - Homogeneous linear equations with constant coefficients –Rules for finding complementary functions – Rules for finding particular integral – Solution of homogeneous linear equation of any order.

Unit V: Applications of Partial Differential Equations

Method of separation of variables – Vibration of a stretched string: Wave equation – Solution of Wave equation - D'Alembert's solution of wave equation – One dimensional heat flow – Solution of heat equation – Two dimensional heat flow – Solution of Laplace equation: temperature distribution in long plates, Temperature distribution in finite plates.

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

1. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006
2. N.P.Bali, Manish Goyal, A Text Book of Engineering Mathematics, Lakshmi Publications, 2010 reprint.
3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

Semester V

APPLIED MATHEMATICS FOR MECHANICAL ENGINEERS III

(B.E. FIFTH SEMESTER – MECHANICAL ENGINEERING)

(For students admitted from 2012-13)

UNIT I

(FOURIER SERIES)

Euler's Formulae (Without Proof) – Condition for Fourier expansion – Functions having points of discontinuity – Change of interval – Expansions of even and odd functions -

Half-Range series – Parseval's formula (without proof) – Root mean square value (without proof) – Typical waveforms (Definition Only): Square wave form, Saw toothed waveform, Modified saw toothed waveform, Triangular waveform, Half wave rectifier, Full wave rectifier - Outline of applications of Fourier series in engineering

UNIT II

(CALCULUS OF VARIATIONS)

Functionals – Euler’s Equation - Solutions of Euler’s equation – Geodesics – Isoperimetric problems – Several dependant variables – Functionals involving higher order derivatives – Approximate solution of boundary value problems: Rayleigh-Ritz method.

UNIT III

(COLLECTION AND ANALYSIS OF DATA)

Classification and tabulation of data - Frequency tables - Graphical representation - Measures of central tendency : Averages, mean, median, mode, Geometric and harmonic means - Measures of dispersion : Range, quartile deviation, Mean deviation, Standard deviation - Relative distribution - Moments - Skewness - Kurtosis - Linear correlation - Coefficient of correlation - Grouped data : calculation of correlation coefficient - Rank correlation - Linear regression - Regression lines.

UNIT IV

(ANALYSIS OF TIME SERIES)

Measurement of trend: Freehand method, Semi-average method, Moving average method, Method of least squares – Measuring trends by logarithms – Measurement of seasonal variations: Method of simple averages, Ratio-to-trend method, Ration-to-moving average method, Link relative method – Measurement of cyclic variations: Residual method, Reference cycle analysis method, Direct method, Harmonic analysis method – Measurement of irregular variations – Outline of applications of analysis of time series in engineering.

UNIT V

(DESIGN OF EXPERIMENTS)

Parameters and statistics – Sampling distribution – Tests of hypothesis and tests of significance – Critical region and level of significance – Errors in testing of hypothesis –one tailed and two tailed tests – Procedure for testing of hypothesis – Design of experiments – Completely randomized design: Analysis of variance for one factor of classification – Randomized block design: Analysis of variance for two factors of classification – Latin square design: Analysis of variance for three factors of classification – Outline of applications of design of experiments in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOKS

1. Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.
2. Gupta S.P, Statistical Methods, 31st Edition, Sultan Chand and Sons., New Delhi, 2002.

REFERENCES

1. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons
2. Forsyth, Calculus of variations, Cambridge.
3. Snedecor George W. Cochran William G, Statistical Methods, Affiliated East West Press

Semester – VII

OPERATION RESEARCH

(B.E. SEVENTH SEMESTER – MECHANICAL ENGINEERING)

(For students admitted from 2012-13)

UNIT I

(LINEAR PROGRAMMING AND SIMPLEX METHOD)

Mathematical formulation of the problem - Graphical solution method - Exceptional cases - General linear programming problem - Canonical and standard forms of linear programming problem - The simplex method - Computational procedure : The simplex algorithm - Artificial variable techniques : Big M method, Two phase method - problem of degeneracy.

UNIT II

(TRANSPORTATION, ASSIGNMENT AND ROUTING PROBLEMS)

Mathematical formulation of the transportation problem - Triangular basis - Loops in a transportation table - Finding initial basic feasible solution (NWC, IBM and VAM methods) - Moving towards optimality - Degeneracy in transportation problems- Transportation algorithm (MODI method) - Unbalanced transportation problems - Mathematical formulation of the assignment problem - Assignment algorithm : Hungarian assignment method - Routing problems : Travelling salesman problem.

UNIT III

(GAME THEORY AND SEQUENCING PROBLEMS)

Two person zero sum games - Maxmin Minmax principle - Games without saddle points (Mixed strategies) - Solution of 2 X 2 rectangular games - Graphical method - Dominance property - Algebraic method for m x n games - Matrix oddments method for m x n games - Problem of sequencing - Problems with n jobs and 2 machines - Problems with n jobs and k machines - Problems with 2 jobs and k machines.

UNIT IV

(INTEGER PROGRAMMING AND INVENTORY CONTROL)

Gomory's All I.P.P method - Gomory's mixed integer method - Branch and bound method - Reasons for carrying inventory - Types of inventory - Inventory decisions - Economic order quantity - Deterministic inventory problem - EOQ problem with price breaks - Multi item deterministic problem.

UNIT V

(REPLACEMENT PROBLEMS AND PERT/CPM)

Replacement of equipment or asset that deteriorates gradually - Replacement of equipment that fails suddenly - Recruitment and promotion problem - Network and basic components - Rules of network construction - Time calculations in networks - Critical path method (CPM) - PERT - PERT calculations - Negative float and negative Slack - Advantages of network (PERT/CPM).

TEXT BOOK

1. Kanti Swarup, P.K.Gupta and Man Mohan, Operations Research, Eighth Edition, Sultan Chand & Sons, New Delhi, 1999.

REFERENCES

1. H.A.Taha, Operations Research, Sixth Edition, MacMillan.
2. Richard Bronson, Operations Research, (Schaum's Outline Series, McGraw Hill Company, 1982.
3. J.K.Sharma, Operation Research (Theory and Applications), Mac Millen Ltd., 199

CIVIL AND CIVIL STRUCTURAL ENGINEERING

SEMESTER – I

MATHEMATICS – I – CALCULUS , MULTIVARIABLE CALCULUS AND LINEAR ALGEBRA

(B.E. FIRST SEMESTER – CIVIL & CIVIL STRUCTURE ENGINEERING)

(For the students admitted from 2018-19)

The objective of this course is to familiarize the prospective engineers with techniques in calculus, multivariate analysis and linear algebra. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics.

Unit-I Matrix

Symmetric- Skew-symmetric- Orthogonal matrices - Eigen values and Eigenvectors - Cayley-Hamilton Theorem - Diagonalization of Matrices - Orthogonal transformation and Quadratic to Canonical forms.

Unit-II Sequence & Series

Convergence of sequence and series - tests for convergence - Comparison test - D'Alembert's ratio test - Raabe's test - Cauchy's root test - Fourier series: Half range sine and cosine series - Parseval's theorem.

Unit-III Multivariable Calculus - Differentiation

Evolutes and Involutives - Partial derivatives - Total derivative - Maxima, Minima and Saddle points - Vector differentiation: Directional Derivatives - Tangent Plane and Normal line - Gradient, Divergence and Curl - Solenoidal - Irrotational.

Unit-IV Multiple Integrals

Multiple Integration - Double and Triple integrals (Cartesian and polar) - Change of order of integration in double integrals - Applications of definite integrals to evaluate surface areas and volumes of revolutions.

Unit –V Vector Integration

Theorems of Green, Gauss and Stokes (without proof) - Beta and Gamma functions and their properties

Suggested Books

1. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.
2. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, 9th Edition, Pearson, reprint, 2002.
3. Veerarajan T., Engineering Mathematics for first year, Tata McGraw-Hill, New Delhi, 2008.
4. Ramana B.V., Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th Reprint, 2010.
5. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2010.
6. E. Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 2006.

SEMESTER – II

MATHEMATICS – II – DIFFERENTIAL EQUATIONS, NUMERICAL METHODS

(B.E. SECOND SEMESTER – CIVIL & CIVIL STRUCTURE ENGINEERING)

(For the students admitted from 2018-19)

The objective of this course is to familiarize the prospective engineers with techniques in ordinary differential equations of higher order, Partial differential equations, Numerical methods and integration. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics.

To understand the basic concepts in Ordinary and Partial Differential Equations.

Unit- I Ordinary Differential Equations of Higher Orders

Operator D – Rules for finding complementary function – Rules for finding particular Integral – Working procedure to solve the equation - Method of variation of parameters - Equations reducible to linear equations with constant coefficients: Cauchy's homogeneous linear equation.

Unit- II Partial Differential Equations – First order

Formation of partial differential equations – Solution of a partial differential equation – Equations solvable by direct integration – Linear equations of first order – Non linear equations of the first order

Unit- III Partial Differential Equations – Higher order

Solution to homogeneous and non-homogeneous linear partial differential equations second and higher order by complementary function and particular integral method.

Method of separation of variables – Vibration of a stretched string: Wave equation – Solution of Wave equation - D'Alembert's solution of wave equation – One dimensional heat flow – Solution of heat equation.

Unit-IV Numerical Methods

Solution of algebraic and transcendental equations - Bisection method – Method of false position (Regula-Falsi Method) - Newton-Raphson Iterative method-Numerical integration: Trapezoidal rule - Simpson’s one-third rule - Simpson’s three-eighth rule.

Unit- V Numerical Solution of Ordinary Differential Equations

Interpolation with equal intervals – Newton’s forward interpolation formula – Newton’s backward interpolation formula - Interpolation with unequal intervals: Lagrange’s interpolation formula, Newton’s divided difference formula. Picard’s method – Taylor series method - Modified Euler’s method – Runge’s method – Runge-Kutta method – Predictor-corrector methods: Milne’s method,

Suggested Books

1. Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.
2. P. Kandasamy, K. Thilagavathy, K. Gunavathi, Numerical Methods, S. Chand & Company, 2nd Edition, Reprint 2012.
3. Chandrika Prasad, Advanced Engineering Mathematics, Khanna Book Publishing Co. (P) Ltd., Delhi
4. Ramana B.V., Higher Engineering Mathematics, Tata McGraw Hill
5. Sashtry, Advanced Engineering Mathematics (ISBN:9788120336094), PHI

SEMESTER – III**ENGINEERING MATHEMATICS -III****(B.E. THIRD SEMESTER – CIVIL & CIVIL STRUCTURE
ENGINEERING)****(For students admitted in 2017-2021 batch)**

To enable the students in applying mathematical methods in various engineering fields by making them to understand the method of Fourier series and Fourier Transform and Z-Transform.

Unit I: Interpolation and Numerical Solution of Ordinary Differential Equations

Interpolation with equal intervals – Newton's forward interpolation formula – Newton's backward interpolation formula - Interpolation with unequal intervals: Lagrange's interpolation formula, Newton's divided difference formula. Picard's method – Taylor series method - Modified Euler's method – Runge's method – Runge-Kutta method – Predictor-corrector methods: Milne's method, Outline of applications of numerical solutions of ordinary differential equations in engineering.

Unit II: Fourier Series

Euler's Formulae (Without Proof) – Condition for Fourier expansion – Functions having points of discontinuity – Change of interval – Expansions of even and odd functions – Half Range series – Parseval's formula (without proof) – Root mean square value (without proof) – Typical waveforms (Definition Only): Square wave form, Saw toothed waveform, Modified saw toothed waveform, Triangular waveform, Half wave rectifier, Full wave rectifier - Outline of applications of Fourier series in engineering

Unit III: Laplace Transforms and Its Applications

Transforms of elementary functions : $1, t^n, e^{at}, \sin at, \cos at, \sinh at, \cosh at$ - Properties of Laplace transforms: Linearity Property, First shifting property, Change of scale property – Transforms of derivatives - Transforms of integrals - Multiplication by t^n - Division by t - Evaluation of integrals by Laplace transform - Inverse transforms: Method of partial fractions – Other methods of finding inverse - Convolution theorem (Without proof) - Unit step function – Unit Impulse Function - Application to differential equations – Outline of applications of Laplace transforms in engineering.

Unit IV: Z – Transform and Its Applications

Standard z-transforms of $1, a^n, n^p$ – Linearity property – Damping rule – Shifting rules – Multiplication by n - Initial and final value theorems (without proof) – inverse z –transforms – Convolution theorem (without proof) – Convergence of z-transforms – Two sided z-transform – Evaluation of inverse z-transforms: Power series method, Partial fraction method, inversion integral method – Application to difference equations – Outline of applications of z-transform in engineering

Unit V: Fourier Transforms and Its Applications

Fourier integral theorem (without proof) - Fourier Sine and Cosine integrals – Complex form of Fourier integral - Fourier integral representation of a function - Fourier transform – Fourier sine and Cosine transforms – Properties of Fourier Transforms: Linear property, Change of scale property, Shifting property - Parseval’s identity for Fourier transforms (without proof) – Application of transforms to boundary value problems: Heat conduction, Vibrations of a string, Transmission lines.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

- Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006
2. Gerald C.F and Wheatley P.O, Applied Numerical Analysis, Addison-Wesley Publishing Company, 7th Edition, 2003
3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

SEMESTER – IV**ENGINEERING MATHEMATICS -IV****(B.E. FOURTH SEMESTER – CIVIL & CIVIL STRUCTURE
ENGINEERING)****(For students admitted in 2017-2021 batch)**

To provide a definite idea about complex functions and their applications. To solve series solution of differential equation, higher order partial differential equations and difference equation.

Unit I: Analytic Functions

Limit and continuity of a complex function - Derivative of a complex function: Cauchy Riemann equations – Analytic functions – Harmonic functions - Orthogonal system – Applications to flow problems – Geometric representation of a complex function - Standard transformations: Translation, Magnification and rotation, Inversion and reflection, Bilinear transformation - Conformal transformation – Special conformal transformations : $e^z, z^2, z + \frac{1}{z}$ Outline of applications of analytic functions in engineering

Unit II: Complex Integration

Integration of complex functions – Cauchy's theorem (without proof) – Cauchy's integral formula (without proof) – Taylor's series (without proof)– Laurent's series (without proof) – Zeros and Singularities of an analytic function – Residues – Residue theorem (without proof) – Calculation of residues – Evaluation of real definite integrals: Integration around the unit circle, Integration around a small semi-circle, Integration around rectangular contours, Indenting the contours having poles on the real axis – Outline of applications of complex integration in engineering.

Unit III: Calculus of Variations

Functionals – Euler's Equation - Solutions of Euler's equation – Geodesics – Isoperimetric problems – Several dependant variables – Functionals involving higher order derivatives – Approximate solution of boundary value problems: Rayleigh-Ritz method.

Unit IV: Partial Differential Equations

Formation of partial differential equations – Solution of a partial differential equation – Equations solvable by direct integration – Linear equations of first order – Non-linear equations of the first order – Charpit's method - Homogeneous linear equations with constant coefficients –Rules for finding complementary functions –

Rules for finding particular integral – Solution of homogeneous linear equation of any order.

Unit V: Applications of Partial Differential Equations

Method of separation of variables – Vibration of a stretched string: Wave equation – Solution of Wave equation - D'Alembert's solution of wave equation – One dimensional heat flow – Solution of heat equation – Two dimensional heat flow – Solution of Laplace equation: temperature distribution in long plates, Temperature distribution in finite plates.

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

1. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006
2. N.P.Bali, Manish Goyal, A Text Book of Engineering Mathematics, Laksmi Publications, 2010 reprint.
3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

SEMESTER V

APPLIED MATHEMATICS FOR CIVIL ENGINEERS III

(B.E. FIFTH SEMESTER – CIVIL AND STRUCTURAL ENGINEERING)

(For students admitted from 2012-13)

UNIT I

(COLLECTION AND ANALYSIS OF DATA)

Classification and tabulation of data - Frequency tables - Graphical representation - Measures of central tendency : Averages, mean, median, mode, Geometric and harmonic means - Measures of dispersion : Range, quartile deviation, Mean deviation, Standard deviation - Relative distribution - Moments - Skewness - Kurtosis - Linear correlation - Coefficient of correlation - Grouped data : calculation of correlation coefficient - Rank correlation - Linear regression - Regression lines.

UNIT II

(PROBABILITY THEORY)

Random experiment – Mathematical, statistical and axiomatic definitions of probability – Conditional probability – Independent events - Theorem of total probability – Theorem of probability of causes: Bayes's theorem – Bernoulli's trials – De Moivre-Laplace approximation – Generalization of Bernoulli's theorem multinomial distribution – Outline of applications of probability theory in engineering.

UNIT – III

(THEORETICAL DISTRIBUTIONS)

Binomial distribution: Properties and constants of Binomial distribution – Fitting a Binomial distribution - The multinomial distribution – Negative Binomial distribution – Poisson distribution: Properties and constants of Poisson distribution – Fitting a Poisson distribution – Hyper-geometric distribution – Normal distribution: Properties and constants of Normal distribution – Fitting a normal curve – Outline of applications of theoretical distributions in engineering

UNIT IV

(ANALYSIS OF TIME SERIES)

Measurement of trend: Freehand method, Semi-average method, Moving average method, Method of least squares – Measuring trends by logarithms – Measurement of seasonal variations: Method of simple averages, Ratio-to-trend method, Ratio-to-moving average method, Link relative method – Measurement of cyclic variations: Residual method, Reference cycle analysis method, Direct method, Harmonic analysis method – Measurement of irregular variations – Outline of applications of analysis of time series in engineering.

UNIT V

(DESIGN OF EXPERIMENTS)

Parameters and statistics – Sampling distribution – Tests of hypothesis and tests of significance – Critical region and level of significance – Errors in testing of hypothesis – One tailed and two tailed tests – Procedure for testing of hypothesis – Design of experiments – Completely randomized design: Analysis of variance for one factor of classification – Randomized block design: Analysis of variance for two factors of classification – Latin square design: Analysis of variance for three factors of classification – Outline of applications of design of experiments in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK

Gupta S.P, Statistical Methods, 28th Edition, Sultan Chand and Sons., New Delhi, 1997.

REFERENCES:

1. Montgomery Douglas C. and. Runger George C, Applied Statistics and Probability for Engineers, John Wiley & Sons, Inc,
2. Richard Isaac, The Pleasures of Probability, Springer Verlag, 1995.
3. Spiegel Murry R., Stephens Larry J. Statistics, (Schaum's Outline Series), McGraw Hill Company

Computer Science Engineering & Information Technology
SEMESTER – I

MATHEMATICS I – CALCULUS & LINEAR ALGEBRA

**(B.E. FIRST SEMESTER – COMPUTER SCIENCE ENGINEERING &
INFORMATION TECHNOLOGY)**

(For students admitted in 2018-2019 batch)

The objective of this course is to familiarize the prospective engineers with techniques in calculus, Multi-variable calculus and sequence and series. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics.

Unit I: Calculus

Evaluation of definite and improper integrals- Beta and Gamma functions and their properties - Applications of definite integrals to evaluate surface areas and volumes of revolutions.

Unit II: Numerical Methods

Solution of polynomial and transcendental equations – Bisection method-Newton-Raphson method-Regula-Falsi Method. Interpolation- Newton's forward and backward difference formulae- Interpolation with unequal intervals-Newton's divided difference and Lagrange's formulae-Numerical Differentiation.

Unit III: Sequences and Series

Convergence of sequence and series-tests for convergence- Comparison test-D'Alembert's ratio test- Raabe's test-Lagrange's test- Cauchy's root test- Fourier series: Half range sine and cosine series-Parseval's theorem.

Unit IV: Multivariable Calculus (Differentiation)

Limit-Continuity - Partial derivatives, total derivatives- Directional derivatives- Tangent plane and normal line- Maxima, minima and saddle points-Method of Lagrange multipliers-Gradient-Curl -Divergence.

Unit V: Matrices

Matrices: Rank of a matrix-rank-nullity theorem-System of linear equations- Symmetric matrices-Skew symmetric matrices- Orthogonal matrices; Eigen values and Eigenvectors- Cayley-Hamilton theorem-Diagonalization of matrices

Suggested Books

1. B.S. Grewal, “Higher Engineering Mathematics”, Khanna Publishers, 2000.
2. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, Pearson, 2002.
3. T. Veerarajan, Engineering Mathematics, McGraw-Hill, New Delhi, 2008.
4. B. V. Ramana, Higher Engineering Mathematics, McGraw Hill, New Delhi, 2010.
5. N.P. Bali and M. Goyal, A text book of Engineering Mathematics, Laxmi Publications,2010..
6. E. Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 2006.

SEMESTER – II**MATHEMATICS II – PROBABILITY & STATISTICS****(B.E. SECOND SEMESTER – COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY)****(For students admitted in 2018-2019 batch)**

The objective of this course is to familiarize the students with statistical techniques. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling various problems in the discipline.

Unit I: Basic Probability:

Probability spaces, conditional probability, Independent random variables, sums of independent random variables, Bayes' Theorem, Discrete and Continuous one dimensional random variables - Expectations, Moments, Variance of a sum, Moment generating function, Tchebyshev's Inequality.

Unit II: Probability Distributions:

Discrete Distributions – Binomial, Poisson and Negative Binomial distributions, Continuous Distributions - Normal, Exponential and Gamma distributions.

Unit III: Basic Statistics:

Measures of Central tendency: Averages, mean, median, mode, Measures of dispersion – Range, Mean deviation, Quartile deviation and Standard deviation, Moments, skewness and Kurtosis, Correlation and regression – Rank correlation.

Unit IV: Applied Statistics:

Curve fitting by the method of least squares- fitting of straight lines, second degree parabolas and more general curves. Test of significance: Large sample test for single proportion, difference of proportions, single mean, difference of means, and difference of standard deviations.

Unit V: Small samples:

Test for single mean, difference of means and correlation coefficients, test for ratio of variances - Chi-square test for goodness of fit and independence of attributes.

Suggested Text Books:

1. T. Veerarajan, Probability, Statistics and Random Processes, Third edition, Tata McGraw-Hill, New Delhi, 2010.
2. S.P. Gupta, Statistical Methods, 31st edition, Sultan chand and sons, New Delhi, 2002.
3. Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
4. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 35th Edition, 2000.
5. S. Ross, A First Course in Probability, 6th Ed., Pearson Education India, 2002.
6. W. Feller, An Introduction to Probability Theory and its Applications, Vol. 1, 3rd Ed., Wiley, 1968.
7. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2010.

SEMESTER – III

APPLIED MATHEMATICS FOR COMPUTERS - I

**(B.E. THIRD SEMESTER – COMPUTER SCIENCE ENGINEERING &
INFORMATION TECHNOLOGY)**

(For students admitted in 2012-2013 batch)

Any person can learn this Paper but before that the candidate can know the formula's of Differentiation and Integration.

To get knowledge about differential equations, Probability Theory, Distributions and Testing of Hypothesis.

OBJECTIVES:

1. To introduce the basic concepts of one dimensional and two dimensional Random Variables.
2. To provide information about Estimation theory, Correlation, Regression and Testing of hypothesis.
3. To enable the students to use the concepts of multivariate normal distribution and principle components analysis.

OUTCOME:

After completion of the course the students are expected to be able to:

The student will able to acquire the basic concepts of Probability and Statistical techniques for solving mathematical problems which will be useful in solving Engineering Problems.

UNIT – I

(INTERPOLATION AND NUMERICAL INTEGRATION)

Interpolation with equal intervals – Newton's forward interpolation formula - Newton's backward interpolation formula - – Interpolation with unequal intervals: Lagrange's interpolation formula, Newton's divided difference formula – Numerical integration: Trapezoidal rule- Simpson's one-third rule – Simpson's three-eighth rule – Outline of applications of interpolation & Numerical integration in engineering.

UNIT – II

(NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS)

Picard's method – Taylor's series method – Euler's method – Modified Euler's method – Runge's method – Runge-Kutta method – Predictor-corrector method :Milne's method, Adam's Bashforth method - Outline of applications of numerical solution of ordinary differential equations in Engineering.

UNIT – III

(PROBABILITY THEORY)

Random experiment – Mathematical, statistical and axiomatic definitions of probability – Conditional probability – Independent events - Theorem of total probability – Theorem of probability of causes: Bayes's theorem – Bernoulli's trials – De Moivre-Laplace approximation – Generalization of Bernoulli's theorem multinomial distribution – Outline of applications of probability theory in engineering.

UNIT – IV

(THEORETICAL DISTRIBUTIONS)

Binomial distribution: Properties and constants of Binomial distribution – Fitting a Binomial distribution - The multinomial distribution – Negative Binomial distribution – Poisson distribution: Properties and constants of Poisson distribution – Fitting a Poisson distribution – Hyper-geometric distribution – Normal distribution: Properties and constants of Normal distribution – Fitting a normal curve – Outline of applications of theoretical distributions in engineering

UNIT – V

(TESTING OF HYPOTHESIS)

Tests of Hypothesis- Sampling distribution-Estimation and testing of hypothesis- Tests of hypothesis and tests of significance- Critical region and level of significance- Errors in testing of hypothesis- One-tailed and Two-tailed tests- Critical values – procedure of testing of hypothesis-Tests of significance for large samples–Tests of significance for small samples- Student's t-Distribution- Snedecor's F-distribution-Chi-square distribution-Chi-square test of Goodness of fit.

TEXT BOOK

1. Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.
2. Veerarajan. T., Probability, Statistics and Random Processes, Third Edition, Tata McGraw-Hill Publishers, New Delhi 2008.

REFERENCE BOOKS

1. Erwin Kreyszig, Advanced Engineering Mathematics , 10th Edition, John Wiley & Sons, 2010
2. Gerald C.F and Wheatley P.O, Applied Numerical Analysis, 7th Edition , Pearson Education India, 2007
3. Gupta S.P, Statistical Methods, 28th Edition, Sultan Chand & Sons., New Delhi, 1997.

SEMESTER – III

APPLIED DISCRETE MATHEMATICS

(B.E. THIRD SEMESTER – COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY)

(For Computer Science Engineering students admitted in 2012-2013 batch)

Understanding of Math (in general Sets, Boolean Algebra, Graphs, State Machines, ideas of Algorithms)

Introduce the students to the foundational aspects of combinatorial mathematics via a selection of topics like graphs, relations, trees, state machine.

OBJECTIVES:

1. To introduce a number of discrete mathematical structures found to be serving as tools in the development of theoretical computer science.
2. To focus on how discrete structures actually helped computer engineers to solve problems occurred in the development of programming languages.
3. To know about the importance of discrete structures towards simulation of a problem to computer science & engineering.

OUTCOME:

After completion of the course the students are expected to be able to

1. Have knowledge on various discrete structures.
2. Define the key concepts of graph theory and use graph structures to represent data sets and relations on them.
3. Deal with problems which may arrive in computer science & engineering.
4. Prepare for entrance examinations involving placement opportunities.

UNIT – I (RELATIONS AND DIGRAPHS)

Product sets and partitions – Relations and digraphs – Paths in relations and digraphs – Properties of relations – Equivalence relations – Computer

representation of relations and digraphs – Operations on relations – Transitive closure and Warshall's algorithm – Outline of applications of digraphs in information technology.

UNIT – II

(ORDER RELATIONS AND STRUCTURES)

Partially ordered sets – External elements of partial ordered sets – Lattices – Finite Boolean algebras – Functions of Boolean algebras – Circuit designs – Outline of applications of Boolean algebras in information technology.

UNIT – III

(TREES)

Trees – Labelled trees – Tree searching – Undirected trees – Minimal spanning trees – Outline of applications of trees in information technology.

UNIT – III

(TOPICS IN GRAPH THEORY)

Graphs – Euler paths and circuits – Hamiltonian paths and circuits – Transport networks – Matching problems – Coloring problems – Outline of applications of graph theory in information technology.

UNIT – V

(LANGUAGES AND FINITE STATE MACHINES)

Semi groups (Definition only) – Product and quotients and semi groups (Definition only) - Languages – Representations of special grammars and languages – Finite state machines – Semi groups, machines and languages – Machines and regular languages – Simplification of machines– Outline of applications of finite state machines in information technology.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

TEXT BOOK:

1. Kolman B., Busby R.C. and Ross S., Discrete Mathematical Structures for Computer Science, Fifth Edition, Prentice Hall of India, New Delhi, 2006.

REFERENCE BOOKS:

1. Kenneth H. Rosen, Discrete Mathematics and its Applications, 7th Edition, Tata McGraw Hill, 2011

2. Susanna S. Epp, Discrete Mathematics with Applications, 4th Edition ,
Brookes/Cole Publishing Company,2010
3. J.P.Trembley, R.Monahor, Discrete Mathematical Structures with
Applications to Computer Science, Tata McGraw Hill, New Delhi

SEMESTER – IV

MATHEMATICAL LOGIC AND COMBINATORICS

(B.E. FOURTH SEMESTER – COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY)

(For Computer Science Engineering students admitted in 2015 batch)

The person who can learn this Subject before that the candidate can know the basic Knowledge of normal forms (Conjunctive & Disjunctive).

To get more Knowledge about Normal forms, Combinations, Permutations, Binomial coefficients and Recurrence Relations.

OBJECTIVES:

1. To review sets, relations, functions, and other foundations
2. To understand propositional and predicate logics and their applications
3. To understand formal models of computations and Permutations.
4. To review the rules of Conjunctive normal forms and Disjunctive normal form.

OUTCOME:

After successfully completing this course a student should be able to

1. To explain sets, relations, functions.
2. To conduct proofs using normal forms and Duality Law.
3. To apply counting, permutations, combinations, and recurrence relations
4. To explain logic programming and functional programming principles

UNIT – I

Mathematical logic- Connectives-Negation-Conjunction-Disjunction-Statement formulas and truth tables-Conditional and Biconditional-Well formed formulas-Tautologies-Equivalence of formulas-Duality law-Tautological implications-Formulas with distinct truth tables-Functionally complete set of connectives.

UNIT – II

Normal forms-Disjunctive normal forms-Conjunctive normal forms- Principle of disjunctive normal forms-Principle of conjunctive normal forms-The theory of inference for statement calculus-validity using truth tables-Rules of inference-Consistency of premises and indirect method of proof.

UNIT – III

Basics of counting-Sum rule-Product rule-Combinations and Permutations-Enumerating combinations and permutations with repetitions-Enumerating permutations with constrained repetitions.

UNIT – IV

Binomial coefficients-Problems on multinomial theorem- Principle of inclusion and exclusion-Generating function models-Calculating coefficients of generating functions.

UNIT – V

Recurrence relations- The Fibonacci relation-properties of Fibonacci numbers-Solving recurrence relations by substitutions and generating functions-Methods of characteristic roots-Solutions of In homogenous recurrence relations-methods of undetermined coefficients.

TEXT BOOKS

1. Discrete Mathematical Structures with Applications to Computer Science- J.P.Tremblay and R. Manohar-McGraw-Hill International Editon ,1987(Units-I & Unit-II)
2. Discrete Mathematics for Computer Scientists & Mathematicians- JeoL.Mott, Abraham Kandel-Theodore P.Baker-Second Edition,Eastern Economy Edition(PHI),1986(Unit-III, Unit-V and Unit-V)

REFERENCES

1. Fundamentals of Discrete Mathematical Structures, K.R. Chowdhary,Third Edition, PHI Learning,2015

SEMESTER – V

AUTOMATA THEORY

**(B.E. FOURTH SEMESTER – COMPUTER SCIENCE ENGINEERING &
INFORMATION TECHNOLOGY)**

(For Computer Science Engineering students admitted from 2012-2013)

Basic knowledge of Mathematics, Set theory, Mathematical induction principles.

AIM:

To develop mathematical foundation to help in courses on compiler designer, digital circuits and software programming

OBJECTIVES:

The objective of the course is to impart knowledge on Automata Theory

OUTCOME:

After completion of the subject the students are expected to be able to

1. Design of digital circuits.
2. Design of Lexical analyzer
3. Designing software for identifying the words, phrases and other patterns in large bodies of text.
4. To write software for processing the natural language.
5. To apply in Artificial Intelligence and knowledge engineering, in game theory and games, computer graphics, linguistics etc.,

UNIT – I FINITE AUTOMATA

An informal picture of finite automata - Deterministic finite automata –
Non-deterministic finite automata – An application: Text search –
Finite automata with epsilon transitions

UNIT II

REGULAR EXPRESSIONS AND LANGUAGES

Regular expressions – Finite automata and regular expressions –
Applications of regular expressions: Regular expressions in UNIX,
Lexical analysis, Finding patterns in a text – Algebraic laws for regular
expressions

UNIT III

CONTEXT FREE GRAMMARS AND LANGUAGES

Context free grammars – Parse trees – Applications of context free
grammars: Parsers, The YACC parser generator, Markup languages, XML
and document type definitions – Ambiguity in grammars and languages.

UNIT IV PUSHDOWN AUTOMATA

Pushdown automaton – The languages of a Pushdown automaton –
Equivalence of Pushdown automaton and Context free grammars –
Deterministic pushdown automata.

UNIT V

INTRODUCTION TO TURING MACHINES

Problems that computers cannot solve – The Turing machine –
Programming techniques for Turing machines – Extensions to the basic
Turing machine – Restricted Turing machines – Turing machines and
computers

Note: The second edition of the prescribed text book differs drastically in
treatment (Application oriented) from the first edition (Theory oriented).
Hence the treatment of the second edition is to be followed. Questions are
to be set on problem solving and not on the theoretical aspects.

TEXT BOOK

Hopcroft E.John, Motwani Rajeev, Ullman D. Jeffrey, Introduction to Automata theory, Languages and Computation, Second Edition, Pearson Education 2001

REFERENCE BOOKS

1. Anderson, A.James, Automata theory with Modern Applications, Cambridge University Press, 2006
2. Carlos Martín-Vide, Victor Mitrana, Grammars and Automata for String Processing, Taylor & Francis, CRC Press, 2004
3. Linz Peter, An Introduction To Formal Languages And Automata, Jones & Bartlett Publishers, 2011

SEMESTER – V

RESOURCE MANAGEMENT TECHNIQUES

(B.E. FOURTH SEMESTER – COMPUTER SCIENCE ENGINEERING & INFORMATION TECHNOLOGY)

(For Computer Science Engineering students admitted from 2012-2013)

Understanding of Programming, Sequencing, Graphs, State Machines, Algorithms

Introduce the students to the foundational aspects of Mathematical Programming in Resource management techniques.

OBJECTIVES:

1. To introduce the Mathematical formulation of the problem to be serving as tools in the development of theoretical computer science.
2. To focus on Transportation and assignment model in computer engineers to solve problems occurred in the development of programming languages.
3. To know about the importance of Game theory in computer science & engineering.
4. To know the methods to solve replacement and sequencing problems in computer engineers.
5. To Solve problems in Resource allocation Scheduling.

OUTCOME:

After completion of the course the students are expected to be able to,

1. Have the knowledge of the Mathematical formulation of the problem which is a tools in the development of theoretical computer science.
2. Solve the problems on Transportation and assignment model in computer engineers.
3. Have the knowledge of Game theory in computer science & engineering.

4. Solve replacement and sequencing problems in computer engineers.
5. Solve problems in Resource allocation Scheduling.

UNIT – I

LINEAR PROGRAMMING AND SIMPLEX METHOD

Mathematical formulation of the problem - Graphical solution method - Exceptional cases - General linear programming problem - Canonical and standard forms of linear programming problem - The simplex method - Computational procedure : The simplex algorithm - Artificial variable techniques : Big M method - problem of degeneracy.

UNIT – II

TRANSPORTATION, ASSIGNMENT AND ROUTING PROBLEMS

Mathematical formulation of the transportation problem - Triangular basis - Loops in a transportation table - Finding initial basic feasible solution (NWC, LCM and VAM methods) - Moving towards optimality - Degeneracy in transportation problems- Transportation algorithm (MODI method) - Unbalanced transportation problems - Assignment algorithm : Hungarian assignment method - Routing problems : Travelling salesman problem.

UNIT – III GAME

THEORY

Two person zero sum games - Maximin Minimax principle - Games without saddle points (Mixed strategies) - Solution of 2 X 2 rectangular games - Graphical method - Dominance property - Algebraic method for $m \times n$ games - Matrix oddments method for $m \times n$ games.

UNIT – IV

REPLACEMENT AND SEQUENCING PROBLEMS

Replacement of equipment or asset that deteriorates gradually - Replacement of equipment that fails suddenly - Recruitment and promotion problem - Problem of sequencing - Problems with n jobs and 2 machines - Problems with n jobs and k machines - Problems 2 jobs and k machines.

UNIT – V NETWORK MODELS

Network and basic components- Rules of network constructions- Time calculations in networks- Critical path method(CPM)-PERT- PERT calculations- Negative float and negative slack- Advantages of network(PERT/CPM) -Project Cost - Time Cost Optimization Algorithm – Linear Programming formulation - Precedence planning -Updating - Resource allocation Scheduling.

PRESCRIBED BOOK

1. Kanti Swarup, P.K.Gupta and Man Mohan, Operations Research, Eighth Edition, Sultan Chand & Sons, New Delhi, 1999.

REFERENCE BOOKS

1. H.A.Taha, Operations Research, Eighth Edition, Pearson Education India, 2008
2. Richard Bronson, Operations Research, (Schaum's Outline Series), Second Edition McGraw Hill Company, 2003.
3. S.Hillier and J.Liebermann, Operations Research, Sixth Edition, Mc Graw Hill Company, 1995.
4. J.K.Sharma, Operation Research (Theory and Applications), First Edition, Mac Millen Ltd., 1997.
5. Barry Render, Ralph M. Stair, Allynan Bacon, Quantitative Analysis for Management, Fifth Edition, Boston, 1994.

SEMESTER – IV

APPLIED MATHEMATICS TECHNOLOGY- II

(B.TECH. FOURTH SEMESTER)

(For Information Technology Engineering students admitted from 2012-2013)

UNIT I

(RELATIONS AND DIGRAPHS)

Product sets and partitions – Relations and digraphs – Paths in relations and digraphs – Properties of relations – Equivalence relations – Computer representation of relations and digraphs – Operations on relations – Transitive closure and Warshall's algorithm – Outline of applications of digraphs in information technology.

UNIT II

(ORDER RELATIONS AND STRUCTURES)

Partially ordered sets – Extremal elements of partial ordered sets – Lattices – Finite Boolean algebras – Functions of Boolean algebras – Circuit de signs – Outline of applications of Boolean algebras in information technology.

UNIT III

(TREES)

Trees – Labelled trees – Tree searching – Undirected trees – Minimal spanning trees – Outline of applications of trees in information technology.

UNIT IV

(TOPICS IN GRAPH THEORY)

Graphs – Euler paths and circuits – Hamiltonian paths and circuits – Transport networks – Matching problems – Coloring problems – Outline of applications of graph theory in information technology.

UNIT V

(LANGUAGES AND FINITE STATE MACHINES)

Semi groups (Definition only) – Product and quotients and semi groups (Definition only) - Languages – Representations of special grammars and languages – Finite state machines – Semi groups, machines and languages – Machines and

regular languages – Simplification of machines – Outline of applications of finite state machines in information technology.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK

Kolman B., Busby R.C. and Ross S., Discrete Mathematical Structures for Computer Science, Fifth Edition, Prentice Hall of India, New Delhi, 2006.

REFERENCES

1. Kenneth H. Rosen, Discrete Mathematics and its Applications, Tata McGraw Hill
2. Susanna S. Epp, Discrete Mathematics with applications, Brookes/Cole Publishing Company
3. J.P.Trembley, R.Monahor, Discrete Mathematical Structures with Applications to Computer Science, Tata McGraw Hill, New Delhi

SEMESTER – IV

APPLIED MATHEMATICS TECHNOLOGY- III

(B.TECH. FIFTH SEMESTER)

(For Information Technology Engineering students admitted from 2012-2013)

UNIT I

(COLLECTION AND ANALYSIS OF DATA)

Classification and tabulation of data - Frequency tables - Graphical representation - Measures of central tendency : Averages, mean, median, mode, Geometric and harmonic means - Measures of dispersion : Range, quartile deviation, Mean deviation, Standard deviation - Relative distribution - Moments - Skewness - Kurtosis - Linear correlation - Coefficient of correlation - Grouped data : calculation of correlation coefficient - Rank correlation - Linear regression - Regression lines.

UNIT II

(PROBABILITY THEORY)

Random experiment – Mathematical, statistical and axiomatic definitions of probability – Conditional probability – Independent events - Theorem of total probability – Theorem of probability of causes: Bayes's theorem – Bernoulli's trials – De Moivre-Laplace approximation – Generalization of Bernoulli's theorem multinomial distribution – Outline of applications of probability theory in engineering.

UNIT – III

(THEORETICAL DISTRIBUTIONS)

Binomial distribution: Properties and constants of Binomial distribution – Fitting a Binomial distribution - The multinomial distribution – Negative Binomial distribution – Poisson distribution: Properties and constants of Poisson distribution – Fitting a Poisson distribution – Hyper-geometric distribution – Normal distribution: Properties and constants of Normal distribution – Fitting a normal curve – Outline of applications of theoretical distributions in engineering

UNIT IV

(ANALYSIS OF TIME SERIES)

Measurement of trend: Freehand method, Semi-average method, Moving average method, Method of least squares – Measuring trends by logarithms – Measurement of seasonal variations: Method of simple averages, Ratio-to-trend method, Ratio-to-moving average method, Link relative method – Measurement of cyclic variations: Residual method, Reference cycle analysis method, Direct method, Harmonic analysis method – Measurement of irregular variations – Outline of applications of analysis of time series in engineering.

UNIT V

(DESIGN OF EXPERIMENTS)

Parameters and statistics – Sampling distribution – Tests of hypothesis and tests of significance – Critical region and level of significance – Errors in testing of hypothesis – One tailed and two tailed tests – Procedure for testing of hypothesis – Design of experiments – Completely randomized design: Analysis of variance for one factor of classification – Randomized block design: Analysis of variance for two factors of classification – Latin square design: Analysis of variance for three factors of classification – Outline of applications of design of experiments in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK

Gupta S.P, Statistical Methods, 28th Edition, Sultan Chand and Sons., New Delhi, 1997.

REFERENCES:

1. Montgomery Douglas C. and. Runger George C, Applied Statistics and Probability for Engineers, John Wiley & Sons, Inc,
2. Richard Isaac, The Pleasures of Probability, Springer Verlag, 1995.
3. Spiegel Murry R., Stephens Larry J. Statistics, (Schaum's Outline Series), McGraw Hill Company.

ECE, EEE, EIE, Mechatronics**SEMESTER – I****MATHEMATICS – I – CALCULUS AND DIFFERENTIAL EQUATION****(B.E. FIRST SEMESTER –ECE, EEE, EIE, Mechatronics)****(For the students admitted from 2018-19)**

The objective of this course is to familiarize the prospective engineers with techniques in calculus, differential equations and sequence and series. It aims to equip the students with standard concepts and tools at an intermediate to advanced level that will serve them well towards tackling more advanced level of mathematics.

Unit-I Sequences and Series

Convergence of sequence and series -Tests for convergence -Comparison,- Ratio- Cauchy's Root- Raabe's test-logarithmic test- Fourier series: Half range sine and cosine series- Parseval's theorem.

Units-II Differential Equations

Second order linear differential equations with constant coefficients – Cauchy_ Euler equation, Legendre equation-Method of variation of parameters- First order partial differential equations: Formation of PDE - solutions of first order linear PDEs.

Unit-III Calculus

Evaluation of definite integral-Applications of definite integrals - To evaluate surface areas and volumes of revolutions; Beta and Gamma functions and their properties.

Unit-IV Multivariable Calculus

Multiple Integration- double and triple integrals (Cartesian and polar)-change of order of integration in double integrals- Change of variables (Cartesian to polar), Applications-areas and volumes by double integration-Center of mass and Gravity (constant and variable densities).

Unit-V Numerical Methods

Solution of polynomial and transcendental equations – Bisection method- Newton-Raphson method- Regula-Falsi method- Finite differences- Interpolation using Newton's forward and backward difference formulae- Central difference interpolation- Gauss's forward and backward formulae

Suggested Books:

1. B.S. Grewal, "Higher Engineering Mathematics", Khanna Publishers, 2000.
2. G.B. Thomas and R.L. Finney, Calculus and Analytic geometry, Pearson, 2002.
3. T. Veerarajan, Engineering Mathematics, McGraw-Hill, New Delhi, 2008.
4. B. V. Ramana, Higher Engineering Mathematics, McGraw Hill, New Delhi, 2010.
5. N.P. Bali and M. Goyal, A text book of Engineering Mathematics, Laxmi Publications, 2010..
6. E. Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 2006.

SEMESTER – II**MATHEMATICS – II – LINEAR ALGEBRA, TRANSFORM
CALCULUS & NUMERICAL METHODS****(B.E. SECOND SEMESTER –ECE, EEE, EIE, Mechatronics)****(For the students admitted from 2018-19)**

This course aims at familiarising the prospective engineers with techniques in Linear Algebra, Transform Calculus and Numerical Methods. To understand the fundamental concepts in the above said topics. To develop the ability to evaluate the problems in transform calculus and its application in various areas.

Unit I : Matrices

Rank of a matrix, System of linear equations; Symmetric, skew-symmetric and orthogonal matrices; Eigenvalues and eigenvectors; Diagonalization of matrices; Cayley-Hamilton theorem, Orthogonal transformation and quadratic to canonical forms.

Unit II: Numerical Methods

Ordinary differential equations: Taylor's series, Euler and modified Euler's methods. Runge-Kutta method of fourth order for solving first order equations. Milne's predictor corrector methods. Partial differential equations: Finite difference solution two dimensional Laplace equation and Poisson equation, Implicit and explicit methods for one dimensional heat equation (Bender-Schmidt and Crank-Nicholson methods), Finite difference explicit method for wave equation

Unit III: Transform Calculus- I

Laplace Transforms : Definition, Properties of Laplace transforms: Linearity Property, First shifting property, Change of scale property – Transforms of derivatives - Transforms of integrals - Multiplication by t^n - Division by t - Evaluation of integrals by Laplace transform - Inverse transforms: Method of partial fractions – Other methods of finding inverse - Convolution theorem (Without proof) Application to differential equations

Unit IV: Transform Calculus- II

Fourier integral theorem (without proof) - Fourier Sine and Cosine integrals – Complex form of Fourier integral - Fourier transform – Fourier sine and Cosine transforms – Properties of Fourier Transforms: Linear property, Change of scale property, Shifting property -Parseval's identity for Fourier transforms (without proof) – Application of transforms to boundary value problems: Heat conduction, Vibrations of a string, Transmission lines

Unit V: Transform Calculus- III

Standard z-transforms of $1, a^n, n^p$ – Linearity property – Damping rule – Shifting rules – Multiplication by n - Initial and final value theorems (without proof) – inverse z –transforms – Convolution theorem (without proof) – Convergence of z-transforms – Two sided z- transform – Evaluation of inverse z-transforms: Power series method, Partial fraction method, inversion integral method.

Suggested Books:

1. Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.
2. Alan Jeffrey, Advanced Engineering Mathematics, Academic Press
3. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons
4. Gerald C.F and Wheatley P.O, Applied Numerical Analysis, Addison-Wesley Publishing Company

ENGINEERING MATHEMATICS -III

(B.E. SECOND SEMESTER –ECE, EEE, EIE, Mechatronics)

(For students admitted in 2017-2021 batch)

To enable the students in applying mathematical methods in various engineering fields by making them to understand the method of Fourier series and Fourier Transform and Z-Transform.

Unit I: Interpolation and Numerical Solution of Ordinary Differential Equations

Interpolation with equal intervals – Newton’s forward interpolation formula – Newton’s backward interpolation formula - Interpolation with unequal intervals: Lagrange’s interpolation formula, Newton’s divided difference formula. Picard’s method – Taylor series method - Modified Euler’s method – Runge’s method – Runge-Kutta method – Predictor-corrector methods: Milne’s method, Outline of applications of numerical solutions of ordinary differential equations in engineering.

Unit II: Fourier Series

Euler’s Formulae (Without Proof) – Condition for Fourier expansion – Functions having points of discontinuity – Change of interval – Expansions of even and odd functions – Half Range series – Parseval’s formula (without proof) – Root mean square value (without proof) – Typical waveforms (Definition Only): Square wave form, Saw toothed waveform, Modified saw toothed waveform, Triangular waveform, Half wave rectifier, Full wave rectifier - Outline of applications of Fourier series in engineering

Unit III: Laplace Transforms and Its Applications

Transforms of elementary functions : $1, t^n, e^{at}, \sin at, \cos at, \sinh at, \cosh at$ - Properties of Laplace transforms: Linearity Property, First shifting property, Change of scale property – Transforms of derivatives - Transforms of integrals - Multiplication by t^n - Division by t - Evaluation of integrals by Laplace transform - Inverse transforms: Method of partial

fractions – Other methods of finding inverse - Convolution theorem (Without proof) - Unit step function – Unit Impulse Function - Application to differential equations – Outline of applications of Laplace transforms in engineering.

Unit IV: Z – Transform and Its Applications

Standard z-transforms of $1, a^n, n^p$ – Linearity property – Damping rule – Shifting rules – Multiplication by n - Initial and final value theorems (without proof) –

inverse z –transforms – Convolution theorem (without proof) – Convergence of z -transforms – Two sided z -transform – Evaluation of inverse z -transforms: Power series method, Partial fraction method, inversion integral method – Application to difference equations – Outline of applications of z -transform in engineering

Unit V: Fourier Transforms and Its Applications

Fourier integral theorem (without proof) - Fourier Sine and Cosine integrals – Complex form of Fourier integral - Fourier integral representation of a function - Fourier transform – Fourier sine and Cosine transforms – Properties of Fourier Transforms: Linear property, Change of scale property, Shifting property - Parseval's identity for Fourier transforms (without proof) – Application of transforms to boundary value problems: Heat conduction, Vibrations of a string, Transmission lines.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

1. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006
2. Gerald C.F and Wheatley P.O, Applied Numerical Analysis, Addison-Wesley Publishing Company, 7th Edition, 2003
3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

SEMESTER – IV**ENGINEERING MATHEMATICS -IV****(B.E. SECOND SEMESTER –ECE, EEE, EIE, Mechatronics)****(For students admitted in 2017-2021 batch)**

To provide a definite idea about complex functions and their applications. To solve series solution of differential equation, higher order partial differential equations and difference equation.

Unit I: Analytic Functions

Limit and continuity of a complex function - Derivative of a complex function: Cauchy Riemann equations – Analytic functions – Harmonic functions - Orthogonal system – Applications to flow problems – Geometric representation of a complex function - Standard transformations: Translation, Magnification and rotation, Inversion and reflection, Bilinear transformation - Conformal transformation – Special conformal transformations : $e^z, z^2, z + \frac{1}{z}$ Outline of applications of analytic functions in engineering

Unit II : Complex Integration

Integration of complex functions – Cauchy's theorem (without proof) – Cauchy's integral formula (without proof) – Taylor's series (without proof)– Laurent's series (without proof) – Zeros and Singularities of an analytic function – Residues – Residue theorem (without proof) – Calculation of residues – Evaluation of real definite integrals: Integration around the unit circle, Integration around a small semi-circle, Integration around rectangular contours, Indenting the contours having poles on the real axis – Outline of applications of complex integration in engineering.

Unit III: Series Solution of Differential Equations

Validity of series solution - Series solution when $x=0$ is an ordinary point - Frobenius method (Series solution when $x=0$ is a regular singularity) - Bessel's equation (Bessels functions of the first and second kind) - Recurrence formulae for $J_n(x)$ - Expansions for J_0 and J_1 : Value of $J_{1/2}$ - Generating function for $J_n(x)$ - Equations reducible to Bessel's equation – Orthogonality of Bessel functions – Outline of applications of Bessel's functions in engineering.

Unit IV : Partial Differential Equations

Formation of partial differential equations – Solution of a partial differential equation – Equations solvable by direct integration – Linear equations of first order – Non-linear equations of the first order – Charpit's method - Homogeneous linear equations with constant coefficients –Rules for finding complementary functions –

Rules for finding particular integral – Solution of homogeneous linear equation of any order.

Unit V: Difference Equations and Its Applications

Formation of difference equations – Linear difference equations – Rules for finding the complementary function – Rules for finding the particular integral – Simultaneous difference equations with constant coefficients – Outline of other applications of difference equations in

Prescribed Text Book:

Grewal B.S, Higher Engineering Mathematics, 41st Edition, Khanna Publishers, New Delhi, 2011.

References

1. Erwin Kreyszig, Advanced Engineering Mathematics, John Wiley & Sons, 9th Edition, 2006
2. N.P.Bali, Manish Goyal, A Text Book of Engineering Mathematics, Laksmi Publications, 2010 reprint.
3. Ramana.B.V. Higher Engineering Mathematics, Tata McGraw Hill New Delhi, 11th reprint, 2010.

SEMESTER – V

APPLIED MATHEMATICS FOR ELECTRONIC ENGINEERS III

**(B.E. FIFTH SEMESTER – ELECTRONICS AND COMMUNICATIONS
ENGINEERING)**

(For students admitted from 2012-13)

**UNIT I
(PROBABILITY THEORY)**

Random experiment – Mathematical, statistical and axiomatic definitions of probability – Conditional probability – Independent events - Theorem of total probability – Theorem of probability of causes: Bayes's theorem – Bernoulli's trials – De Moivre-Laplace approximation – Generalization of Bernoulli's theorem multinomial distribution – Outline of applications of probability theory in engineering.

**UNIT II
(ONE DIMENSIONAL RANDOM VARIABLES)**

Discrete random variable – Probability mass functions of Binomial, Poisson, Pascal and Geometric distributions - Continuous random variable – Probability density function of Uniform, Normal, Gamma, Erlang, Rayleigh, Maxwell and Laplace distributions - Cumulative distribution function – Outline of applications of one dimensional random variables in engineering.

**UNIT III
(TWO DIMENSIONAL RANDOM VARIABLES)**

Two dimensional random variables – Probability mass function – Joint probability density function – Cumulative distribution function – Marginal probability distribution – Conditional probability distribution – Independent random vectors – F unction of random variable - Outline of applications of two dimensional random variables in engineering.

**UNIT IV
(STATISTICAL AVERAGES)**

Measures of central tendency – Mathematical expectation and moments – Measures of dispersion – Coefficient of variation – Skewness – Kurtosis – Pearson's shape coefficients– Expected values of a two dimensional random variables – Linear correlation – Correlation coefficient – Rank correlation coefficient – Regression – Equation of the regression line – Outline of applications of statistical averages in engineering.

UNIT V

(STATISTICAL INEQUALITIES)

Characteristic function – Moment generating function – Cumulative generating function – Bounds on probability: Tchebycheff, Bienayme's, Schwartz and Cauchy-Schwartz inequalities (without proof) – Convergence concepts and central limit theorem – Outline of applications of statistical inequalities in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK:

Veerarajan. T.," Probability, Statistics and Random Processes, Third Edition, Tata McGraw-Hill Publishers, New Delhi 2008.

REFERENCES:

1. Gubner, John, Probability and random process for electrical and computer engineers, Cambridge
2. Gupta S.P, Statistical methods, Sultan Chand & Sons
3. Papoulis, Probability, Random Variables and Stochastic Processes, McGraw Hill.

SEMESTER – VI

APPLIED RANDOM PROCESSES

**(B.E. SIXTH SEMESTER – ELECTRONICS AND COMMUNICATIONS
ENGINEERING)**

(For students admitted from 2012-13)

UNIT I

(SPECIAL PROBABILITY DISTRIBUTIONS)

Special discrete distributions - Binomial distribution – Poisson distribution – Geometric distribution – Hyper geometric distribution – Special continuous distributions – Uniform distribution – Exponential distribution – Erlang distribution – Weibull distribution – Normal distribution – Outline of applications of special probability distributions in engineering.

UNIT II

(RANDOM PROCESSES)

Classification of random processes – Methods of description of a random process – Special classes of random processes – Average values of random processes – Analytical representation of a random processes – Autocorrelation function and its properties – Cross correlation function and its properties – Outline of applications of random processes in engineering

UNIT III

(ERGODIC PROCESS)

Ergodicity – Mean Ergodic process – Correlation Ergodic process – Distribution Ergodic process – Power spectral density function and its properties – System in the form of convolution – Unit impulse response of the system – Outline of applications of ergodic process in engineering.

UNIT IV

(SPECIAL RANDOM PROCESSES I)

Poisson process – Probability law for the Poisson Process – Second order probability function of a homogeneous Poisson process – Mean and autocorrelation of the Poisson process – Properties of Poisson process - Markov process – Markov chain – Chapman Kolmogorov theorem (without proof) – Classification of states of a Markov chain - Outline of applications of Poisson and Markov processes in engineering.

UNIT V

(SPECIAL RANDOM PROCESSES II)

Gaussian process – Processes depending on stationary Gaussian process: Square law detector process, Full wave linear detector process, Half wave linear detector process, Hard limiter process – Band pass process (Signal) - Narrow band Gaussian process - Quadrature representation of a WSS process - Noise in communication systems – Thermal noise – Filters – Outline of applications of Gaussian process in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK:

Veerarajan. T.,” Probability, Statistics and Random Processes, Third Edition, Tata McGraw-Hill Publishers, New Delhi 2008.

REFERENCES:

1. Gubner, John, Probability and random process for electrical and computer engineers, Cambridge
2. Gupta S.P, Statistical methods, Sultan Chand & Sons
3. Papoulis, Probability, Random Variables and Stochastic Processes, McGraw Hill.

SEMESTER – V

APPLIED MATHEMATICS FOR INSTRUMENTATION ENGINEERS III

(B.E. FIFTH SEMESTER – ELECTRONICS AND INSTRUMENTATION ENGINEERING)

(For students admitted from 2012-13)

UNIT I

(PROBABILITY THEORY)

Random experiment – Mathematical, statistical and axiomatic definitions of probability – Conditional probability – Independent events - Theorem of total probability – Theorem of probability of causes: Bayes's theorem – Bernoulli's trials – De Moivre-Laplace approximation – Generalization of Bernoulli's theorem multinomial distribution – Outline of applications of probability theory in engineering.

UNIT II

(ONE DIMENSIONAL RANDOM VARIABLES)

Discrete random variable – Probability mass functions of Binomial, Poisson, Pascal and Geometric distributions - Continuous random variable – Probability density function of Uniform, Normal, Gamma, Erlang, Rayleigh, Maxwell and Laplace distributions - Cumulative distribution function – Outline of applications of one dimensional random variables in engineering.

UNIT III

(TWO DIMENSIONAL RANDOM VARIABLES)

Two dimensional random variables – Probability mass function – Joint probability density function – Cumulative distribution function – Marginal probability distribution – Conditional probability distribution – Independent random vectors – Function of random variable - Outline of applications of two dimensional random variables in engineering.

UNIT IV

(STATISTICAL AVERAGES)

Measures of central tendency – Mathematical expectation and moments – Measures of dispersion – Coefficient of variation – Skewness– Kurtosis – Pearson's shape

coefficients – Expected values of a two dimensional random variables – Linear correlation – Correlation coefficient – Rank correlation coefficient – Regression – Equation of the regression line – Outline of applications of statistical averages in engineering.

UNIT V

(STATISTICAL INEQUALITIES)

Characteristic function – Moment generating function – Cumulative generating function – Bounds on probability: Tchebycheff, Bienayme's, Schwartz and Cauchy-Schwartz inequalities (without proof) – Convergence concepts and central limit theorem – Outline of applications of statistical inequalities in engineering.

Note: Questions are to be set on problem solving and not on the theoretical aspects.

PRESCRIBED TEXT BOOK:

Veerarajan. T.,” Probability, Statistics and Random Processes, Third Edition, Tata McGraw-Hill Publishers, New Delhi 2008.

REFERENCES:

1. Gubner, John, Probability and random process for electrical and computer engineers, Cambridge
2. Gupta S.P, Statistical methods, Sultan Chand & Sons
3. Papoulis, Probability, Random Variables and Stochastic Processes, McGraw Hill.

SEMESTER – VI

OPERATION RESEARCH

(B.E. SIXTH SEMESTER – ELECTRONICS AND INSTRUMENTATION

ENGINEERING)

(For students admitted from 2012-13)

UNIT I

(LINEAR PROGRAMMING AND SIMPLEX METHOD)

Mathematical formulation of the problem - Graphical solution method - Exceptional cases - General linear programming problem - Canonical and standard forms of linear programming problem - The simplex method - Computational procedure : The simplex algorithm - Artificial variable techniques : Big M method, Two phase method - problem of degeneracy.

UNIT II

(TRANSPORTATION, ASSIGNMENT AND ROUTING PROBLEMS)

Mathematical formulation of the transportation problem - Triangular basis - Loops in a transportation table - Finding initial basic feasible solution (NWC, IBM and VAM methods) - Moving towards optimality - Degeneracy in transportation problems- Transportation algorithm (MODI method) - Unbalanced transportation problems - Mathematical formulation of the assignment problem - Assignment algorithm : Hungarian assignment method - Routing problems : Travelling salesman problem.

UNIT III

(GAME THEORY AND SEQUENCING PROBLEMS)

Two person zero sum games - Maxmin Minmax principle - Games without saddle points (Mixed strategies) - Solution of 2 X 2 rectangular games - Graphical method - Dominance property - Algebraic method for m x n games - Matrix oddments method

for $m \times n$ games - Problem of sequencing - Problems with n jobs and 2 machines - Problems with n jobs and k machines - Problems with 2 jobs and k machines.

UNIT IV

(INTEGER PROGRAMMING AND INVENTORY CONTROL)

Gomory's All I.P.P method - Gomory's mixed integer method - Branch and bound method - Reasons for carrying inventory - Types of inventory - Inventory decisions - Economic order quantity - Deterministic inventory problem - EOQ problem with price breaks - Multi item deterministic problem.

UNIT V

(REPLACEMENT PROBLEMS AND PERT/CPM)

Replacement of equipment or asset that deteriorates gradually - Replacement of equipment that fails suddenly - Recruitment and promotion problem - Network and basic components - Rules of network construction - Time calculations in networks - Critical path method (CPM) - PERT - PERT calculations - Negative float and negative Slack - Advantages of network (PERT/CPM).

TEXT BOOK

1. Kanti Swarup, P.K.Gupta and Man Mohan, Operations Research, Eighth Edition, Sultan Chand & Sons, New Delhi, 1999.

REFERENCES

1. H. A.Taha, Operations Research, Sixth Edition, MacMillen.
2. Richard Bronson, Operations Research, (Schaum's Outline Series, McGraw Hill Company, 1982.
3. J .K.Sharma, Operation Research (Theory and Applications), Mac Millen Ltd., 1997.

B.C.A. and B.Sc., (Computer Science)
SEMESTER – I

MATHEMATICAL FOUNDATION TO COMPUTER SCIENCE

- Study basic Discrete mathematics required for computer science
- To learn the concepts of matrices, set theory and graph theory.
- To learn mathematical logic and relations.

OUTCOMES

- Understand the basic discrete mathematics principles.
- Understand the basics of matrices, set theory and graph theory.
- Understand Mathematical logic and relations.

UNIT I : **Matrices:** – Introduction – Determination – Inverse of a matrix – Rank of a Matrix - Eigen value Problems

UNIT II : **Set theory:**-Introduction-Set & its Elements-Set Description-Types of sets-Venn-Euler Diagrams- Set operations & Laws of set theory-Fundamental products-partitions of sets-minsets- Algebra of sets and Duality-Inclusion and Exclusion principle

UNIT III : **Mathematical logic:** Introduction- propositional calculus –Basic logical operations- Tautologies-Contradiction-Argument-Method of proof- Predicate calculus.

UNIT IV : **Relations:**Binary Relations – Set operation on relations-Types of Relations – Partial order relation – Equivalence relation – Composition of relations – Functions – Types of functions – Invertible functions – Composition of functions.

UNIT V : **Graph Theory :**Basic terminology – paths, cycle & Connectivity – Sub graphs - Types of graphs – Representation of graphs in computer memory - Trees – Properties of trees – Binary trees – traversing Binary trees – Computer Representation of general trees.

TEXT BOOKS

1. Engineering Mathematics Volume II – Dr M.K. Venkataraman – NPC (Unit I)

2. Kenneth H. Rosen, Discrete Mathematics and its Applications, 6th Edition, Tata McGraw Hill, New Delhi. (2007).

REFERENCE BOOKS

1. Discrete Mathematics Structures with Applications to computer science - J. P Tremblay R Manohar – McGraw Hill International Edition.
2. Discrete Mathematics – Dr M. K. Venketaramen, DrN.Sridharan, N. Chandarasekaran –The National publishing Company Chennai.

SEMESTER – II**COMPUTER ASSOCIATED NUMERICAL METHOD**

UNIT I: Iterative methods - Introduction – Beginning an Iterative Method – The Method of Successive Bisection – The Method of False Position – Newton Raphson Iterative Method - Secant Method – The Method of Successive Approximation.

Unit II: Solution of Simultaneous Algebraic Equation – Introduction – Direct Method Of Solution – Gauss Elimination Method, Gauss – Jordan Method, Crout’s Method – Iterative Method of Solution – Jacobi’s Method, Gauss Seidal Method – Solution of Non-Linear Simultaneous Equations – Newton-Raphson Method – Determination of Eigen value by Iteration.

Unit III: Interpolation, Numerical Differentiation And Integration – Finite Differences – Newton’s Interpolation Formulae – Interpolation With equal Interval – Lagrange’s Formula; Newton’s Divided Difference Formula – Inverse Interpolation – Numerical Differentiation – Maxima And Minima of Tabulated Functions – Numerical Integration – Trapezoidal Rule; Simpson’s $1/3^{\text{rd}}$ Rule; Simpson’s $3/8^{\text{th}}$ Rule

Unit IV: Numerical Solution of Ordinary Differential Equations – Introduction – Picard’s Method – Taylor’s Series Method – Euler’s Method Modified Euler’s Method-Runge’s Method – Runge-Kutta Method – Predictor-Corrector Method; Milne’s Method

Unit V: Numerical Solution of Partial Differential Equations – Introduction – Classification of Second Order Equation – Finite Difference Approximation to Derivatives – Elliptical Equation – Solution of Laplace’s Equation – Solution of Poisson’s Equation – Parabolic Equation – Solution of Heat Equation – Hyperbolic Equation – Solution of Wave Equation.

Text Book:

1. V.Rajaraman, Computer Oriented Numerical Method, Prentice Hall Of India Pvt Ltd.
2. B.S. Grewal , Higher Engineering Mathematics, Khanna Publishers, New Delhi.

Reference Books

1. Ward Cheney, David Kincaid, Numerical Mathematics And Computing, Brooks And Cole Publishing Company
2. C.Xavier, C Language And Numerical Methods, New Age International Publication.

B.Sc., PHYSICS and B.Sc., CHEMISTRY**ALLIED MATHEMATICS – I****UNIT-I**

Symmetric - Skew Symmetric - Orthogonal and Unitary matrices - Rank of a matrix – Consistency of equations – Eigen roots and eigen vectors- Cayley- Hamilton theorem (without proof) – Verification and computation of inverse matrix.

UNIT-II

Expansions of $\sin x$, $\cos x$, $\tan x$ in terms of x ; $\sin nx$, $\cos nx$, $\tan nx$, $\sin^n x$, $\cos^n x$, $\tan^n x$, hyperbolic and inverse hyperbolic functions- Simple problems.

UNIT-III

Solution of algebraic and transcendental equations- Bisection Method – Method of false position- Newton-Raphson method- Solution of linear simultaneous equations- Gauss elimination method- Gauss Jordan method- Gauss Seidal method.

UNIT-IV

Successive Differentiation- n th order derivatives of standard functions- Leibnitz theorem (without proof)- simple problems- Partial differentiation- Euler's theorem- Problems on Euler's theorem.

UNIT-V

Evaluation of definite and indefinite integrals of types

1. $\int \frac{px+q}{ax^2+bx+c} dx$

2. $\int \frac{px+q}{\sqrt{ax^2+bx+c}} dx$

3. $\int \frac{1}{(px+q)\sqrt{ax^2+bx+c}} dx$

4. $\int \frac{1}{a+b \cos x} dx$

5. $\int \frac{1}{a+b \sin x} dx$

6. $\int \frac{a \cos x + b \sin x + c}{l \cos x + m \sin x + n} dx$

7. $\int_0^{\frac{\pi}{2}} \sin^n x dx$, $\int_0^{\frac{\pi}{2}} \cos^n x dx$

Reference books:

1. Trigonometry : P. Duraipandian.
2. Matrices : A.R. Vasishtha, A.K. Vasishtha.

3. Numerical Methods, Problems and Solutions: M.K. Jain, S.r.K. Iyengar, R.K. Jain
4. S. Narayanan and T. K. ManicavachagomPillay (2004) Calculus. S. Viswanathan Printers & Publishers Pvt. Ltd. Chennai.
5. A. Singaravelu (2003) Algebra and Trigonometry, Vol.-I & II Meenakshi Agency. Chennai.

Choice Based Credit System for U.G and P.G (Mathematics) Programme

Credits

Each course is normally assigned one credit per lecture / tutorial per week and one credit for two periods or part thereof for laboratory or practical per week. Each semester curriculum shall normally have a blend of theory and practical course.

Duration of the Programme

A student is normally expected to complete M.Sc., (Mathematics) Programme in two years but in any case not more than seven years from the time of admission.

Registration for Courses

A newly admitted student will automatically be registered for the entire course prescribed for the first year without any option.

Every other student should submit a completed registration form indicating the list of course intended to be credited during the next semester. This registration will be done a week before the last working day of the current semester. Late registration with the approval of the department along recommendation of the head of the department along with a late fee will be done up to the last working day. Registration for the project work shall be done only for the final semester.

Assessment

The break – up of assessment and examination marks for the theory subjects is as follows:

First Assessment	: 15 Marks
Final Assessment	: 15 Marks
Assignment/Attendance	: 10 Marks
Examination	: 60 Marks

The break – up of assessment and examination marks for the Practical subjects is as follows:

First Assessment	: 15 Marks
Final Assessment	: 15 Marks
Maintenance of Record Book	: 10 Marks
Examination	: 60 Marks

The project work will be assessed for 80 marks by the committee, consisting of the guide and a minimum of two members nominated by the head of the department.

One of the committee members will be nominated as the chairman by the head of the department. The head of the department may himself be a member or the chairman. 120 marks are allotted for the project work and viva voice examination at the end of the semester.

Student Counsellor

To help the students in planning the course of study and for general advice on the academic programme, the head of the department will attach a certain number of students to a member of faculty who shall function as student counsellor for those students throughout their period of study, Such student counsellor shall advice the student, preliminary approval for the courses to be taken by the students during each semester and obtain the final approval of the head of the department.

Class Committee

For all the branches of study during the first year, a common class committee will be constituted by the dean of the faculty from among the various teachers teaching the same common subject to different classes during the first year, the dean shall appoint one of them as course coordinator.

All heads of the departments, among whom one may be nominated as chairman by the dean. The Dean may opt to be a member or the chairman.

For each of the higher semester, separate class committees will be constituted by the head of the department. The composition of the class committees from first to eighth semesters will be follows.

Course co-coordinators are appointed by the head of the department from among the staff members teaching the course.

A project co-ordinator (in the eighth semester committee only) who shall be appointed by the head of the department from among the project supervisors.

All the student counsellors of the class and the head of the department (if not already a member) or any staff member nominated by the head of the department may opt to be special invitees.

The meeting will be held within a week after the completion the first assessment to review the performance and for follow – up action.

The second meeting will be held within a week after the final assessment is completed to review the performance and for the follow – up action.

The third meeting will be held after all the assessments are completed for all the courses, and at least one week before on the commencement of the examinations. During the meeting assessment in a maximum, of 40 marks will be finalized for every student and tabulated and submitted to the head of the department for approval and transmission to the controller of examinations.

Withdrawal from a Course

A student can withdraw from a course at any time before a date fixed by the head of the department prior to the final assessment, with the approval of the dean of the faculty on the recommendation of the head of the department.

Temporary Break of Study

A student can take a one – time temporary break of study covering the current year/ semester and /or the next semester with the approval of the head of the department, not later than after completion of the mid – semester test. However, the student must complete the entire programme within the maximum period of years.

Substitute Arrangement

A student, who has missed, for genuine reasons accepted by the head of the department, one or more of assessments of a course other than the examination, may take a substitute

Assessment for any one of the missed assessments. The substitute assessment must be completed before the date of the fourth meeting of the respective class committees.

A student who wishes to have a substitute assessment for a missed assessment must apply to the head of the department within a week from the date of the missed assessment.

Attendance Requirements

To be eligible to appear for the examination in a particular course, a student must get minimum of 80% in the course. However, if the attendance is 70% or above but less than 80% in any course, the authorities can permit the student to appear for the examination in the course on payment of the prescribed condition fees.

A student who withdraws from or does not meet the minimum attendance requirement in course must re-register for and repeat the course.

Passing and Declaration of Examination Results

All assessments of all the courses on absolute marks basis will be considered and passing by the results passing board in accordance with the rules of the university. Thereafter, the controller of examinations shall convert marks for each course to the corresponding letter grade as follows to compute the

grade point average and cumulative grade point average, and prepare the grade cards.

90-100 Marks	: S Grade
80-89 Marks	: A Grade
70-79 Marks	: B Grade
60-69 Marks	: C Grade
55-59 Marks	: D Grade
50-54 Marks	: E Grade
Less than 50 Marks	: F Grade
Insufficient Attendance	: I Grade
Withdrawn from Course	: W Grade

A student who obtains less than 24 marks out of 60 in the examination or is absent for the examination will be awarded grade „F “.

A student who earns a grade of S, A, B, C, D, or E for a course is declared to have successfully completed that course and earned credits for that course. Such a course cannot repeat by the student.

A student who obtains letter grade F in a course has to reappear for the examinations in that course.

A student who obtains letter grade I or W in a course has to re-register for and repeat the course.

The following grade points are associated with each letter grade for and repeat the point average and cumulative grade point average.

S - 10; A - 09; B - 08; C - 07; D - 06; E - 05; F - 0.

Course with grades I and W is not considered for calculation of grade point average or cumulative grade point average. F grade will be considered for computing GPA and CGPA.

A student can apply for re - totalling for one or more of his examination answer papers within a week from the date of issue of the grade sheet to the

students on payment of prescribed fee per paper. The application must be made to the controller of Examinations with the recommendation of the head of the department.

After results are declared, grade cards will be issued to the students. The grade cards will contain the list of courses registered during the year / semester, the grades scored and the grade point average (GPA) for the year / semester.

GPA is the sum of the products of the number of credits of a course with the grade point scored in that course, taken over all the courses for the year/ semester, divided by the sum of the number of credits for all courses taken in that year / semester. CGPA is similarly calculated considering all the courses taken from the time of admission.

After successful completion of the programme, the degree will be awarded with the following classification based on CGPA.

For First Class with Distinction the student must earn a minimum of 200 credits within four years from the time of admission, pass all the courses in the first attempt and obtain a CGPA of 8.25 or above.

For First Class the student must earn a minimum of 200 credits within five years from the time of admission and obtain a CGPA of 6.5 or above.

For Second Class the student must earn a minimum of 200 credits within seven years from the time of admission.

Electives

Apart from the various elective courses offered in the curriculum of the branch of specification, a student can choose a maximum of three electives from any specialization under the faculty during the entire period of study, with the approval of the head of the department offering the course.

**List of Faculty Members with
Designation & their Area of Specialization**

S.No	Name	Designation	Area of Specialization
1.	Prof. Dr. T. Venugopal	Professor / CoE	Functional Analysis
2.	Prof. Dr. K. Srinivasa Rao	Professor / Head	Algebra
3.	Dr. N. Saradha	Assistant Professor (S-III)	Graph Theory
4.	Dr. R. Malathi	Assistant Professor (S-II)	Multi-valued logic
5.	Dr. D. Vijayalakshmi	Assistant Professor (S-II)	Graph Theory
6.	Dr. E. Geetha	Assistant Professor (S-II)	Fluid Dynamics
7.	Dr. R. Mageswari	Assistant Professor (S-II)	Graph Theory
8.	Dr. P. Nagarajan	Assistant Professor (S-II)	Queuing Theory
9.	Dr. P. Balaji	Assistant Professor (S-II)	Petri Nets
10.	Dr. S. Vijayabarathi	Assistant Professor (S-II)	Algebra
11.	Dr. K. Pramila	Assistant Professor (S-II)	Fuzzy Set Theory
12.	Dr. J. Sengamalaselvi	Assistant Professor (S-I)	Applied Mathematics using ICT
13.	Dr. V. K. Radhakrishnan	Assistant Professor (S-I)	Operation Research
14.	Dr. A. Dhanalakshmi	Assistant Professor (S-I)	Graph Theory
15.	Dr. K. Bharathi	Assistant Professor (S-I)	Operation Research
16.	Dr. T. N. Kavitha	Assistant Professor (S-I)	Algebra
17.	Dr. A. Gayathri	Assistant Professor (S-I)	Applied Mathematics
18.	Ms. B. Amudha	Teaching Assistant	Graph Theory
19.	Mr. K. Saravanan	Teaching Assistant	Graph Theory
20.	Ms. A. Shakila	Teaching Assistant	Graph Theory
21.	Ms. P. Revathi	Teaching Assistant	Graph theory
22.	Ms. G. Subasri	Teaching Assistant	Graph Theory
23.	Ms. T. Indhumathi	Teaching Assistant	Graph Theory
24.	Ms. N. Meenakshi	Teaching Assistant	Graph Theory

Staff Profile

Dr. T. Venugopal



Dr.T.Venugopal, M.Sc, Ph.D, PGDCA, MIMS, MISIAM, MSCIEI, MISTE, MAMTI

Professor of Mathematics, Controller of examinations,

Formerly Director (Research and Publications),

Formerly Professor and Head, Department of Mathematics, Formerly Dean
(Arts and Humanities),

Member – Board of Management; Academic Council;

Planning and Monitoring Board; Research Board;

Board of Studies;

Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya

(SCSVMV University), Enathur, Kanchipuram 631561.

Phone (Office - Direct): +91 44 27264241, +91 44 27264301/308/293 Ext:258

Phone (Office - Secretary): +91 44 27264301/308/293 Ext:287

Mobile: +919578137581

Personal Email: drmathvtg@gmail.com

Official Emails: coe@kanchiuniv.ac.in

University Email: venugopal.t@kanchiuniv.ac.in

Personal characteristics

- Result oriented individual performer and a credible team leader
- Self-starter, problem solver, spiritual thinker, analytic and professional
- Reliable, conscientious, pious, courteous and peace loving
- Adaptable, Capable to work within a framework and industrious

Teaching characteristics

- Teaching meticulously to attentive, inattentive or even lethargic students
- Teaching applicable mathematics to students with no base in mathematics
- Teaching with sense of humor / entertainment / values / anecdotes / quotes
- Teaching Mathematics through Excel / Open Source Software / Case Studies

Personal objectives

- To be a motivator for students, colleagues and friends alike
- To be a spiritual counselor to those in distress / anguish
- To help break barriers between colleagues / friends
- To deliver talks on Value Education / Educare

Teaching objectives

- To aid engineering and management students to learn mathematics comfortably
- To encourage faculty to teach mathematics with a strong bias towards applications
- To facilitate faculty to teach mathematics through software
- To conduct workshops, as coach, on Teaching Mathematics through Software

Academic Brief

- Best outgoing PG student of St.Xaviers College, Palayamkottai
- Passed CSIR-UGC National Eligibility Test for lectureship and fellowship
- Passed PGDCA, Certificate course in Hindi and Simple Spoken Sanskrit Course
- Highly commended doctoral thesis, many publications and paper presentations
- Recipient of prestigious CSIR Junior & Senior Research Fellowship
- Interdisciplinary research interests with Management, Computers & Sanskrit
- Guided & guiding many scholars to M.Phil Dissertation & Ph.D Thesis
- Life member in many professional societies
- Reviewer / Editorial Board Member of many research journals
- Teaching experience of nearly sixteen years at University level
- Chairman, Board of studies in Mathematics, SCSVMV for many years
- Member, Board of Studies in Mathematics
- Member, Academic Council of SCSVMV
- Member, Research Board of SCSVMV

Personal Profile

Name	Thothathri Venugopal
Fathers Name	Narayanan Thothathri
Date of birth	12th April, 1967
Age	50 Years as on 12th April 2017

Languages Known Tamil, English, Hindi (To Speak, To Read and to Write) Working knowledge of Sanskrit, Learning Telugu)

Marital Status Married - Blessed with a composed wife and an understanding son

Interests Collecting and reading books / ebooks in Mathematics and Spirituality Own library of about 500 books in these subjects

Delivering talks on Mathematics and Value Education

Conducting workshops on Mathematics with software as coach

Qualifications M.Sc., Ph.D., PGDCA. CSIR-UGC (NET)

- Passed SSLC in 1982 from Mahatma Gandhi High School, Villupuram
- Passed HSC in 1984 from Municipal Higher Secondary School, Cuddalore
- Passed B.Sc(Maths) in 1987 from Periyar Arts College, Cuddalore
- Passed M.Sc(Maths) in 1989 from Saint Xaviers College, Tirunelveli
- Passed CSIR-UGC (NET) in 1991 from CSIR-UGC, New Delhi
- Passed Hindi Certificate Course in 1992 from Central Hindi Directorate
- Passed PGDCA in 1995 from Madurai Kamaraj University, Madurai
- Awarded Ph.D (Maths) in 1998 from Madurai Kamaraj University,
- Passed Simple Spoken Sanskrit course in 2002 from SCSVMV University

Awards: Best Teacher Award from SCSVMV University 2014

Life Memberships

IMS - Indian Mathematical Society (L/2011/60)

ISIAM - Indian Society for Industrial and Applied Mathematics (V9)

ISTE – International society for Technical Education (LM 3018)

AMTI – The Association of Mathematics Teachers of India (L13065)

MPRERNA - Prerna Soc. of tech. edn and research (PRE/RNAST/131451)

Senior Membership SCIEI - Science and Engineering Institute, USA (20121113002)

Experience 18+ Years in teaching Mathematics and administration

Dr. K.Srinivasa Rao



Professor & Head
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
Mobile Number: 8870688896
E-mail: raokonda@yahoo.com

Name : Dr. K. Srinivasa Rao
Father's Name : Veera Suryam
Date of Birth :15-04-1970
Nationality : Indian
Religion : Hindu
Address for correspondence: Dr. K. Srinivasa Rao
Professor & Head
Dept., of Mathematics
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India
Phone (Office): +91 44 27264301/308 Ext:231
Mobile Number: 8870688896
E-mail: raokonda@yahoo.com

Educational Qualifications:

- Ph.D in Mathematics, from Acharya Nagarjuna University, Guntur, Andhra Pradesh, India, February 2010.
- M.Phil. in Mathematics with **First class**, M.K. University, Madurai, 2004
- Post Graduate Diploma in Computer Science with **First class** University of Hyderabad, Hyderabad, 2003
- Master of Science in Mathemaics with **Distinction**, Jawaharlal Nehru Technological University, Hyderabad,1993.
- Bachelor of Science with **First Class** MVNJS&RVR College of Arts & Sciene, Malikipuram, Andhra University, Waltair, Vishakhapatnam, 1990

- Board of Intermediate Education with **First Class** Hyderabad, Andhra Pradesh, 1987
- Board of Secondary Education with **First Class** Andhra Pradesh, 1985.

Professional Experiences:

1. At present working as an **Professor & HoD, Department of Mathematics** at S.C.S.V.M.V.University, Kanchipuram, Tamilnadu since 02-07-2012.
2. Worked as a **Principal** of Harshavardhana P G College of Computer Science, Cherukupalli, Guntur District during the period 20-05-2010 to 29-06-2012.
3. Worked as a **Professor and Head of the Department of Science and Humanities** at Adam's Engineering College, Paloncha, Khammam District, Andhra Pradesh during the period 1999-2010.
4. Taught Discrete Mathematics & Probability and Statistics subjects at University College of Engineering, Kakatiya University, Kothagudem as a Guest Lecturer for M.C.A students during the period 20th November 2003 to March 2010.
5. Worked as a Lecturer at M.V.N.J.S & R.V.R. Degree College, Malikipuram, East Godavari Dist during the period 1998-1999
6. Worked as a Lecturer at S.N.Raju Jr. College, Gudimellanka, East Godavari District, during the period 1996-1998
7. Worked as a Lecturer at Margadarshi Junior College, Karimnagar, Karimnagar District, during the period 1993-1996

No. of papers published in National/International Journals-40

No. of papers published in conference proceedings-11

No. of books published-2

No. of papers presented in National/International Conference-26

No. of seminars/workshops/conferences attended-36

No. of invited talks delivered/acted as resource Person:50

Recognitions

1. Got Best Teacher award for the academic year 2016-17 from SCSVMV.
2. Received Best Paper Award in International Conference on Contemporary Approaches in Mathematics and Emerging Engineering Trends, organized by Vinayaka Missions University, held on 4-5, May 2017.
3. Got IMRF Distinguished Inspiring Best Teacher Award -2020 from the International Multidisciplinary Research Foundation, Vizayawada, A.P., Indian on Sept 5th, 2020.
4. Got Best Scientist Award from International Multi research Foundation, on the eve of IMRF's 66th International gathering , International Conference on Advances in Mathematics, Computers & Physical Sciences at IMRF Chandigarh Chapter, Chadigarh on 22nd February,20

Programs Conducted:

1. National Workshop on MATLAB Programming, 08-11-2014
2. National Seminar on Emerging Trends in Pure and Applied Mathematics, 24-02-2017
3. International Seminar on Fluid Mechanics, 06-03-2017
4. National Workshop on MATLAB in Applied Sciences, 15-16, September, 2017
5. Winter Refresher Course in Mathematics, 1-3 February, 2018
6. International Conference on Pure and Applied Mathematics, 19-20 February 2018
7. International conference on Pure and Applied Mathematics – II , 17-20 December 2018
8. International workshop on Graph theory and its Application , 20-21 December 2018.

Research Guidance:

Five scholars completed their Ph.D degree

Four research scholars are doing their Ph.D Degree

21 Students completed their M.Phil degree and 1 is doing M.Phil

Administrative Brief

- Nodal Officer, UGC/AISHE
- Chairman-Statistics and Information Cell
- Worked as Assistant Chief Warden during 2014-2015
- Co-Coordinator, National Institute Ranking Framework (NIRF-201 , 2018 & 2019)
- Acted as Chief Superintendent, University Theory Examinations, March-June, 2017
- Co-coordinator-Curricular Aspects, Task Force Committee (TFC) in order to prepare of Self Study Report (SSR) for re-appraisal to NAAC.
- Member of Anti- Ragging Squad during 2014-2017
- Member of Students' Cabinet Advisory Committee from 2015 to till date
- Member of Students Counseling System from 2016 to till date
- Chairman- Board of Studies, Department of Mathematics, SCSVMV

Dr. N. Saradha



Assistant Professor of Mathematics

SCSVMV University,

Enathur, Kanchipuram- 631 501

9843888520, saaradha@yahoo.com

Educational Qualifications:

- Ph.D in mathematics from SCSVMV University.
- M.Phil in Mathematics with First Class with distinction, Annamalai University.
- M.Sc in Mathematics with First Class with distinction, Seethalakshmi Ramaswamy College, Bharathidasan University, 1996 .Bharathidasan University
- B.Sc in Mathematics with First Class, Shrimathi Indra Gandhi College, Bharathidasan University, 1994.

Professional Experiences:

- Working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram since 16, November - 1998.

Other Activities:

Member of Board of Studies

Convener of Time Table Committee

IQAC coordinator

Chair Examiner for Question Paper setting in Periyar University (2016)

TNPSC Exam Chief examiner (2017)

Department Cultural co-ordinator

National Workshop on MATLAB in Applied Sciences – Organizing Secretary

UGC- Hospitality Committee- co ordinator

Anti Ragging Committee-Member

Department Placement coordinator

No. of papers published in National/International Journals-16

No. of papers published in National/International conference proceedings-3

No. of papers presented in National/International Conference-14

No. of seminars/workshops/conferences attended-40

No. of seminars/workshops/conferences organized- 6

Dr.R.Malathi



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
Email ID: :malathihema@yahoo.co.in, r.malathi@kanchiuniv.ac.in
malathilathar@gmail.com

Academic Brief

Guided & guiding many scholars to M.Phil Dissertation
Life member in many professional societies
Editorial board member of IJESIRD Journal
Teaching experience of nearly Fifteen years at University level
Teaching M.E/MCA/MBA/M.Phil/M.Sc/M.Tech/B.E/BCA/B.Sc/BSCS

Personal and Academic Profile

Name : R.MALATHI
Fathers Name : A. Rajendiran
Date of birth : 05.05.1974
Languages Known : Tamil, English(Learning Hindi)
Marital Status : Married
Interests :Collecting and reading books in Mathematics, Delivering talks on Mathematics and Conducting (the sessions of) workshops on Mathematics with software
Qualifications : M.Sc., M.Phil., Ph.D
Occupation : Assistant Professor of Mathematics, SCSVMV
Experience : 16+ Years in teaching Mathematics
Courses Taught : M.E/M.Tech/MCA/MBA/M.Phil/M.Sc/
B.E/BCA/B.Sc/BSCS
Papers Taught : Engineering Mathematics (All Semesters)

Numerical Analysis, Business Statistics, Quantitative Techniques, Operations Research, Discrete Mathematics, Automata Theory, Probability, ODE, Complex Analysis & Statistics.

Research Guidance : Guided 26 M.Phil research scholars
Guiding 1 M.Phil research scholar
1 M.Sc research scholar.

RESEARCH INTERESTS INTER DISCIPLINARY

Multi-valued logic
Operations Research Modeling
Network Models
Linear Algebra
Discrete Mathematics
Applied Graph Theory
Applied Mathematics
Logical agents

EDITORIAL BOARD MEMBER

✚ Editorial board member of IJESIRD Journal.

MEMBERSHIP R. Malathi

✚ AMTI - Junior Mathematics Membership
✚ Indian Society of Industrial and Applied Mathematics (ISIAM),
✚ The Association of Mathematics Teachers of India (AMTI) IAENG -
International Association of Engineers-

AWARDS RECEIVED

- Received more than 300 API Score award on 05.09.2017, SCSVMV.
- Received Rs 1,000/- contribution to the best link between jaina logic and Multi-valued logic on 11.05.2017.
- Received Best Teacher Award on 26.09.2016, SCSVMV University.

No. of papers published in National/International Journals- 25

No. of papers published in conference proceedings-7

No. of books published- 9

No. of papers presented in National/International Conference- 31

No. of seminars/workshops/conferences attended- 73

No. of invited talks delivered: 4



Vijayalakshmi Dhanasekaren

Assistant Professor
Department of Mathematics
Sri Chandrasekarendra Saraswathi Viswa Maha Vidhyalaya
Enathur, Kanchipuram,
Tamilnadu,
India.
E-mail: guruviji97@gmail.com
Mobile: 9445204713

Permanent Address

11/12 Kothaval Street,
Alandur ,Chennai-16
Tamilnadu,
India.

Fields of Research Interest

Graph theory
Application of Graph theory

Educational Degrees

- Ph.D* Department of Mathematics
Sri Chandrasekarendra Saraswathi Viswa Maha Vidhyalaya
Kanchipuram
Thesis Title: Application of Graph theoretical concepts in Protein Analyses
- M.Phil* Algappa University, Karaikudi Tamilnadu 2004, *First class.*
- M.Sc* S.I.V.E.T Arts and Science college, University of Madras, Tamil
nadu.
2002, *First Class.*
- B.Sc* Chellammal Women's College Guindy, Chennai, University of Madras

Tamilnadu, 2000, *First Class*

Higher Secondary Sri Sankara Vidhyalaya with ***First Class***, State Board, 1997

Secondary Sri Sankara Vidhyalaya with ***First Class***, State Board, 1995

Present Position

Assistant Professor Department of Mathematics, Sri Chandrasekarendra Saraswathi Viswa
Maha

Vidhyalaya ,Enathur Kanchipuram, Tamilnadu (2007- till date)

Reviewer American Journal of Mathematics

Professional Experience

1. Worked as a Lecturer at SIVET College Gowrivakkam, during the period April 2002-
June2003.
2. Worked as a Lecturer Chellammal women's college Guindy, during the period July
2003-April 2005.
3. Worked as a Lecturer at New Shri bhavani Arts and Science College during the
period June2005-Dec2006
4. Worked as a Lecturer at T.S.Narayana Swami College of Arts and Science College
during the period Dec2006-July 2007.
5. At present working as an Assistant Professor of Mathematics at SCSVMV,
Kanchipuram,
Tamilnadu since 14-07-2007.

No. of papers published in National/International Journals-14

No. of papers published in National/International conference proceedings-15

No. of papers presented in National/International Conference-5

No. of seminars/workshops/conferences attended-39

No. of seminars/workshops/conferences organized- 5

No. of invited talks delivered-2

No. of programs acted as resource person – 8

No. of Mphil students guided - 9

Dr. E. Geetha



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
Email ID: geethamuthu@gmail.com

Name : Dr.E.GEETHA
Father Name : S.T.Ellappan
Date of Birth : 06.08.1982
Nationality : Indian
Religion : Hindu
Aadhar Number : 5083 5309 7806
Pan Number : ATJPG9577G
Address for Correspondence :No.26, Nithyanandhar Nagar, Kanchipuram 631502
Permanent address : No.26, Nithyanandhar Nagar,
Kanchipuram 631502

Educational Qualification:

Qualified Set Exam, Oct 2016.
Ph.D, Manonmaniam Sundaranar University, Oct 2014
M.Phil with First Class, Alagappa University, June 2006
M.Sc with Distinction, Thiruvalluvar University, May 2005
B.Sc with Distinction, University of Madras, May 2003
HSLC with Distinction, State board, May 2000
SSLC with Distinction, State board, May 1998.

Professional Experience:

- Worked as a Lecturer in Arulmigu Meenakshi Amman College of Engineering, Kanchipuram from September 2005 to July 2007.
- Working as a Assistant Professor (Stage I) in Sri Chandrasekharendra Saraswathi Viswa MahaVidyalaya, Kanchipuram from july 2007 to July 2012.
- Working as a Assistant Professor (Stage II) in Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya, Kanchipuram from July 2012 to till date.

No. of papers published in National/International Journals-16

No. of papers presented in National/International Conference-6

No. of seminars/workshops/conferences attended-43

No. of Programs organized: 2

No. of M.Phil Scholars guided: 22

Resource person activities: 3

Dr.R.Mageswari



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 4427264301/308 Ext:231
E-mail: mageswari78@gmail.com; rmageswari@kanchiuniv.ac.in

Name : R.Mageswari
Father's Name : A.Rajapandian
Date of Birth : 19.06.1978
Nationality : Indian
Religion : Hindu
Aadhar Number : 5894 9093 5616
PAN Number : AZTPM2307E
Designation : Assistant Professor (S-II),
Department of Mathematics,
SCSVMV.
Address for correspondence : Dr.R.Mageswari,
Assistant Professor,
Dept., of Mathematics
SCSVMV,
Enathur,
Kanchipuram- 631 501.
Tamilnadu, India
Mobile Number: 9842853476

Permanent Address : No.97, Arignar Anna Nagar,
Enathur, Kanchipuram-631501.

Educational Qualifications:

Ph.D in Mathematics with distinction, SCSVMV , Enathur, Kanchipuram, 2018

M.Phil. in Mathematics with *First class*, Aditanar College, M.S university, Tirunelveli, 2001.

Master of Science in Mathematics with First class, Aditanar College, M.S University, Tirunelveli, 2000.

Bachelor of Science with First Class Govindammal Aditanar College for Women, Tiruchendur, M.S. University, 1998.

Board of Higher Secondary Education with First Class, Thisaiyanvilai, Tirunelveli District, Tamil Nadu, 1995.

Board of Secondary Education with First Class, Thisaiyanvilai, Tirunelveli District, Tamil Nadu, 1993.

Professional Experiences:

1. Worked as a Lecturer / Officer in Charge at Sri Jeyandra Saraswathi Centre, (Unit of SCSVMV) Kommadikottai, Thoothukudi District, during the period 2002-2007.
2. At present working as an Assistant Professor of Mathematics at SCSVMV, Kanchipuram, Tamilnadu since 2007.

No. of papers published in National/International Journals- 11

No. of papers presented in National/International Conference- 14

No. of seminars/workshops/conferences attended- 54

No. of Programs organized: 7

No. of invited talks delivered: 4

Dr.P.Nagarajan



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: mageswari78@gmail.com: rmageswari@kanchiuniv.ac.in

Name : Dr.P.Nagarajan
Department : Mathematics
Designation : Assistant professor (stage-II)
Qualification : M.sc., M.Phil., Ph.D
Area of research : Queueing theory & Stochastic processes
Date of joining : 23.08.2008
Pan Number : AIYPN6790L
Aadhar Number : 589700721464
Residential Address : No. 28, 29, Adhi Sankarar Nagar,
Enathur-631561
Kanchipuram
Permanent Address : No. 66/29, East car Street,
Chidambaram-608001
Contact number : 93642900300, 9952788541

Research activities:-

- Successfully completed my viva exam on 29.12.17.
- Guiding M.phil research scholars (Mathematics)(regular and part time)
Doing Ph.D in Queueing theory in part time mode from 27-02-12 onwards.

Educational Qualifications:

- Completed Ph.D in Queueing theory in part time mode from Annamalai University on December 2017..

- M.Phil in Mathematics with first class, thesis entitled “**An M/M/1 Retrial Queue with unreliable server**”. Annamali University, Annamalai Nagar, Chidambaram, Cuddalore district, Tamil Nadu, India, (Course completed 2008).
- M.Sc in Mathematics with first class, Annamalai University, Annamalai Nagar, Chidambaram, Cuddalore district, Tamil Nadu, India, (Course completed 2006)
- B.Sc in Mathematics with first class, Sri Karumariamman Government Arts College (Affiliated to University of Madras), C-Mulur, Cuddalore district, Tamil nadu, India (Course completed 2004).

Professional Experiences:

Working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram, Tamilnadu , Since 23-07-2008.

No. of papers published in National/International Journals- 8

No. of papers published in National/International conference proceedings-10

No. of papers presented in National/International Conference-16

No. of seminars/workshops/conferences attended-58

No. of books published: 02

No. of invited talks delivered: 7

Dr. P. Balaji



Assistant Professor

Department of Mathematics,

Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.

Phone (Office): +91 44 27264301/308 Ext:231

E-mail: E-mail: pbr1002007@yahoo.com

Name : **P.BALAJI**

Father's Name : S.Padmanaban

Date of Birth : 15.06.1972

Nationality : Indian

Religion : Hindu

Address for correspondence : P.BALAJI
Assistant Professor
Dept., of Mathematics, SCSVMV University,
Enathur, Kanchipuram- 631 561,
Tamilnadu, India
Mobile Number: +91 9486082115

Permanent Address : P.BALAJI
Plot no 19, Sri Rangaraja veethi,
L.Kanchipuram-631501

Educational Qualification

1. M.Sc.,(Mathematics) Degree 1 Class (Studied at Department of Mathematics, Bharathidasan University, Trichy), Regular Course in the year 1995
2. M.Phil.,(Mathematics) Degree of Madurai Kamaraj University, Madurai in the year 2000
3. PGCDA Course of Madurai Kamaraj University, Madurai in the year 2003
4. GATE-2001
5. Rastrabhasa Praveen from Dakshina Bharathi Prachar Sabha, Chennai in the year 1995
6. PhD completed, Phd(Part time-External) at Sathyabama university Chennai, under the guidance of Dr.Rangarajan of Bharath University, Chennai in Petri Nets area September 2018

Teaching Experience:

1. 7 Years and 3 months experience at Thiruvalluvar College of Engg and Technology, Vandavasi
2. 1 Year and 3 months experience at MNM Jain Engg.College, Chennai-96
3. 4 Years and 6 Months at Arulmigu Meenakshi Amman College of Engg., Kanchipuram.
4. 9 ½ Years' experience at SCSVMV University, Kanchipuram.

No. of papers published in National/International Journals- 16

No. of papers presented in National/International Conference- 13

No. of seminars/workshops/conferences attended- 47

No. of invited talks delivered: 3

No. of programs organized:1

Dr.S.Vijayarathi



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail:vijayarathiguru@gmail.com.

Name : S.Vijayarathi
Father's Name : D.Shanmugam.
Date of Birth : 24.06.1966
Nationality : Indian
Religion : Hindu
Aadhar Number : 7344 9080 0340
Pan Number : ALTPV0089L
Address for correspondence : Mrs.S.Vijayarathi
Assistant Professor,
Dept., of Mathematics,
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India
Mobile Number: +91 9789187704

Permanent Address : Mrs.S.Vijayarathi
233 H,Govindasamy Street,
Sudharsan nagar,
Chinna Kanchipuram-631 501

Educational Qualifications:

- Ph.D in algebra (Mathematics) from SCSVMV University.
- M.Phil in Mathematics with First Class ,Alagappa University,2004.
- M.Sc in Mathematics with First Class, University of Madras, 1989.
- B.Sc in Mathematics with First Class, University of Madras,1987.
- B.Ed in Mathematics and English,Department of Collegiate Education, Tamil Nadu,1991.

Professional Experiences:

- Worked as a PG Assistant in Siddhardha Senior Secondary School, Vellore, during the period 1989-1990.
- Worked as a PG Assistant in Desia Matriculation HrSec.School,Vellore, during the period 1991-1992.
- Worked as a Maths Lecturer in Annai Theresa Teacher training School, Madhurandagam,during the period 1992-1994.
- Worked as a PG Assistant in S.S.K.V.MatricHr.Sec.School, Kancheepuram, during the period 1995-2005
- Worked as a Lecturer in the Department of Mathematics,Sri Sankara Arts & Science College, Enathur,during the period 2005-2008.
- At present working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram since 31, August-2009.

No. of papers published in National/International Journals-9

No. of papers published in National/International conference proceedings-7

No. of papers presented in National/International Conference-8

No. of seminars/workshops/conferences attended-24

No. of books published:1

No. of invited talks delivered: 2

Dr. K. PRAMILA



Assistant Professor
Dept., of Mathematics
SCSVMV University,
Enathur, Kanchipuram- 631 561.
Tamilnadu, India
Mobile Number: 9445779471

Email : kpramila_74@yahoo.com kpramila@kanchiuniv.ac.in

Academic Brief

- Completed Ph.d in SCSVMV University in the area of Fuzzy Set Theory in April 2018.
- Completed M.Phil. (Mathematics) in Manonmaniam Sundaranar University in 2008
- Finished B.Ed. in IGNOU in the year 2004
- Completed M.Sc. (Mathematics) in Bharathidasan University in the year 1996
- Completed B.Sc., (Mathematics) in Bharathidasan University in the year 1994

Personal Profile

Name	: K.PRAMILA
Father's Name	: S.KALIYAMURTHY
Date of Birth	: 09-04-1974
Nationality	: Indian
Religion	: Hindu
Address for Correspondence	: W/o M. SUNDARRAJAN 167/2, Saravana nagar, Sevilimedu Kanchipuram-631 501
Professional Experience	: 7 years of teaching experience in Higher Secondary Schools 13 ½ Years of teaching experience at UG and PG Level
Courses Taught	: B.E., M.E., M.C.A., B.Sc., M.Sc., M.Phil.,
Research Guidance	: Guided - 20 M.Phil., Research Scholars 1 M.Sc., Student

Papers Presented in Conferences : 14
Journal Publication : 12
Programs Attended : 54

Dr.J.SENGAMALASELVI



Asst. Professor of Mathematics
Sri Chandrasekharendra Saraswathi Viswa Mahavidyala
(SCSVMV), Enathur, Kanchipuram 631561
Phone (Office): +91 44 27264301/308 Ext: 231
pavisneka@gmail.com

PERSONAL AND ACADEMIC PROFILE

- ❖ Name : J.Sengamalaselvi
- ❖ Fathers Name : M.Jagadeesan
- ❖ Date of birth : 06.06.1974
- ❖ Languages Known : Tamil, English
- ❖ Marital Status : Married
- ❖ Interests : Collecting and reading books in
Delivering talks on Mathematics and Conducting
Workshop on Mathematics with software

- ❖ Qualifications : M.Sc., B.Ed, M.Phil., Ph.D
- ❖ Occupation : Assistant Professor of Mathematics, SCSVMV
- ❖ Experience : 15+ Years in teaching Mathematics
- ❖ Pan card no : CIXPS0893N
- ❖ Aadhar card No : 812451928682

Professional Experiences:

- ❖ Worked as a Teacher at, Govt. Girls Hsc. School, Uthiramerur Kanchipuram

District, during the period 1997-2001.

- ❖ Worked as a Teacher at SSKV HSc.School, Kanchipuram,during the period, .
- ❖ Worked as a Lecturer at Adiparashakthi Arts &Science College, Kalavai during the period 2001-2014.
- ❖ Worked as a Lecturer at Jei Mathajee Teacher Training Institute, Kanchipuram during the period 2004-2006.
- ❖ Worked As A Lecturer At Jeimathajee College Of Engineering, Kanchipuram during the period 2006-2008.
- ❖ At present working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram, Tamilnadu since 31.08.2009.

Role In Government service

1. Acted as Key Resource Person for PG-Teachers at Coloumbo's Hr.Sec.School, Chengleput conducted by **SCERT, DPI, Chennai on 29-30, Aug-2013.**
2. Acted as **Expert** in the **National level panel committee on Developing new curriculum-2017, organized by SCERT, Tamilnadu** on 20.07.2017 to 22.07.2017.
3. Acted as a Resource person in the **National workshop on Math with open source software with Geogebra to P.G & B.T Mathematics Teacher (Government sector)** on 19th November 2016 in the Government Boys Higher secondary school, Kalasavakkam, Tiruvannamalai Dstrict.

Invited talk

- ❖ Delivered a key note address on **“Two dimensional and three Dimensional graphical representation through optic Math”**on 23.03.2017at **Government Arts and science college, Uttiramerur.**
- ❖ Invited talk on **Geometry and graph of Higher secondary Mathematics education through optic math** in Government high school, vaiyavoor on 14.03.201

- ❖ Invited a talk on **women Empowerment** in the event of Virtual International women's day celebration organized by Department of Computer Science, SCSVMV on 08.03.2021

Resource Person :

- ❖ Acted as assisted the Resource Person in the workshop 'MATLAB and its Applications' on 20.09.13, Conducted by the Department of Mathematics, **SCSVMV University, Enathur. Kanchipuram-631561**. About 78 students from various branches of engineering attended the workshop.
- ❖ Acted as assisted the Resource Person in the "**National Workshop on Matlab Programming on 28th November 2014** Conducted by the Department of Mathematics, SCSVMV University, Enathur, and Kanchipuram-631561.
- ❖ Acted as an Assistant Resource Person in the **National Workshop on Math with Open Source Software** on 3rd & 4th September 2015, organized by the Department of Mathematics, SCSVMV University , Enathur , Kanchipuram.
- ❖ Acted as an Assistant Resource Person in the **National Workshop on MATLAB and its Applications** on 19th September 2015, organized by the Department of Physics jointly with Department of Mathematics, SCSVMV University, Enathur, Kanchipuram.
- ❖ Acted as an Resource Person in the **Two days Workshop on Math with Open Source Software** on 22nd and 23rd December 2015 , organized by the Department of Mathematics, SCSVMV University , Enathur , Kanchipuram.
- ❖ Acted as an Resource Person in the **workshop on Math with open source software** on 6th Feb-2 016, organized by the Department of Mathematics, SCSVMV University, Enathur , Kanchipuram.
- ❖ Acted as a Resource Person in the **workshop on Matlab and its application on 7th Feb-2 016**, organized by the Department of Mathematics, SCSVMV University , Enathur , Kanchipuram.
- ❖ Acted as an Resource Person in the **National workshop on Math with open source software with Geogebra and winplot** on 12th Feb-2016 in the Sankara Arts and Science college, Enathur organized by the Department of Mathematics, SCSVMV University , Enathur , Kanchipuram.

- ❖ Acted as a Resource person in the **workshop on Math with open source software** to St.Mary’s Matriculation Higher secondary school, Mahabalipuram on 25th November 2016.
- ❖ Acted as a Resource person in the National **workshop on Math with open source software** in the Krishna shri Arts and Science College,Kilambi,Kanchipuram on 01.02.2018.
- ❖ Acted as a Chief Guest cum Resource person in the National **workshop on Optic Math with open source software** in the Wisdom women’s Arts and Science College,Cheyar on 28.03.2018.
- ❖ Acted as a Resource person in the **National workshop on open source Mathematics software and its applications** organized by the Department of Mathematics ,St.peter’s Institute of Higher Education and Research, Chennai on 09.11.2018 .
- ❖ Acted as a Resource person in the **National Level workshop on “ open sources softwares in Math** on 13th November 2019 in the Soka Ikeda college of Arts and Science for Women,Madhanangkupam,Chennai

Awards

1. **Dr.J.Sengamalaselvi** , Asst.prof of Mathematics has received “**Best Teacher award (2017-2018)** on the event of Teacher’s day Celebrations , SCSVMV on 05.09.2019.
2. **Dr.J.Sengamalaselvi** , Asst.prof of Mathematics has received “**Best Teacher award (2019-2020)** on the event of Teacher’s day Celebrations , ESN Research group and publications ,Chennai on 28.09.2019.

- ❖ No. of papers published in National/International Journals - 25
- ❖ No. of papers published in proceedings of National/International conferences - 10
- ❖ No. of papers presented in National/International Conference - 35
- ❖ No. of seminars/workshops/conferences attended-80
- ❖ No. of programs acted as resource person - 15
- ❖ No of awards received- 2
- ❖ No of programs organized – 5
- ❖ No of M.Phil students guided – 22
- ❖ No of M.sc students guided-02

Dr.V.K.Radhakrishnan



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: vkraiki@gmail.com

Name : V.K. Radhakrishnan
Father's Name : Mr. V. Kumar
Date of Birth : 14-09-1987
Permanent Address : Mr. V.K. Radhakrishnan
#27, 28 Kamatchi Amman Avenue
Extension I, Across Temple City,
Vishnu Kanchi, Kanchipuram-
631501

Educational Qualification

- Ph.D (Network Optimisation - Operations Research) in SCSVMV Deemed University in the 2018.
- M.Phil (Mathematics) with First Class from SCSVMV University in the year 2011.
- M.Sc., (Mathematics) with first class from Madras Institute of Technology, Anna University, Chrompet, Chennai, in the year 2009.
- B.Sc., (Mathematics) with first class from Madras University, in the year 2004.

Professional Experience

- Presently working as an Assistant Professor at SCSVMV University Since 3rd Sep, 2010.
- Worked as Lecturer, Department of Mathematics at Sri Sankara Arts & Science College, Enathur, Kanchipuram from August' 2009 to August' 2010.

No. of papers published in National/International Journals - 8

No. of papers published in proceedings of National/International conferences - 6

No. of papers presented in National/International Conference - 14

No. of seminars/workshops/conferences attended - 42

No. of programs acted as resource person - 9

No of awards received - 3

No of programs organized – 3

No of M.Phil. Scholars / M.Sc., students guided - 18

Dr. A.Dhanalakshmi



Assistant Professor

Department of Mathematics,
Sri Chandrasekharendra Saraswathi ViswaMahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 4427264301/308 Ext:231
E-mail: dhana_amaresan@yahoo.com

Name : A. DHANALAKSHMI
Father's Name : P. Amaresan
Date of Birth : 11-07-1979
Nationality : Indian
Religion : Hindu
Date of Joining : 29.06.2012

Address for correspondence : A. DHANALAKSHMI,
Assistant Professor,
Dept., of Mathematics
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India
Mobile Number: 9500538546

Permanent Address : A. DHANALAKSHMI,
20, Chengalvarayan Othavadai Street,
Pillaiyarpalayam,
Kancheepuram – 631 501.

Educational Qualifications:

- Ph.D in Mathematics, Title: Graph Theoretical Characterization of Some Chemical Structures For Finding Topological Indices as Molecular Descriptors in SCSVMV University, Enathur,

Kancheepuram.

- M.Phil. in Mathematics with **First class**, Alagappa University, 2004
- Master of Science in Mathematics, Annamalai University, 2001.
- Bachelor of Science with **First Class** Pachaiyappa's College for Women, Kancheepuram, 1999.
- Board of Higher Secondary Education with **First Class**, Tamil Nadu, 1996
- Board of Secondary Education with **First Class**, Tamil Nadu, 1994

Professional Experience:

1. Worked as a Lecturer at Pattammal Alagesan College of Arts and Science, Athur, Chengalpat, during the period 2002-2006
2. Worked as a Lecturer at Arupadaivedu Institute of Technology, Paiyanoor, Kancheepuram District, during the period 2006-2009.
3. Worked as a Lecturer at Shri Sapthagiri Institute of Technology, Ocheri, Vellore District, during the period 2010-2012
4. At present working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram, Tamilnadu since 29-06-2012.

No. of papers published in National/International Journals-8

No. of papers published in National/International conference proceedings-13

No. of papers presented in National/International Conference-25

No. of seminars/workshops/conferences attended-69

No. of seminars/workshops/conferences organized- 5

No. of invited talks delivered-2

No. of programs acted as resource person – 6

No. of Mphil students guided - 16

Dr.K.Bharathi



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: 03bharathi@gmail.com , kbharathi@kanchiuniv.ac.in

Name : K.BHARATHI
Father's Name : M.Krishnamoorthy
Date of Birth : 03-10-1982
Nationality : Indian
Religion : Hindu
Pan No : BLQPB2708A
Aadhar No : 961767047188
Address for correspondence : K.BHARATHI,
Assistant Professor,
Dept., of Mathematics
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India
Mobile Number: 9894281989
Permanent Address : K.BHARATHI,
14,B,Desipalayam street,
Kanchipuram 631 501.

Educational Qualifications:

- Ph.D in Mathematics, Title : Evolutionary Algorithm in Multi Objective Optimization, VIT, Chennai., 2018.
- M.Phil. in Mathematics with **First class**, VIT University, Vellore., 2007
- Master of Science in Mathemaics with **First class**, Thiruvalluvar University, 2006.
- Bachelor of Science with **First Class**, University of Madras, 2004
- Board of Higher Secondary Education with **First Class** Tamil Nadu, 2001
- Board of Secondary Education with **First Class**, Tamil Nadu, 1999.

Professional Experiences:

- Worked as a Lecturer at Thirumalai Engineering College, Kilambi, Kanchipuram – 631551, during the period 2008-2012.
- At present working as an Assistant Professor of Mathematics at SCSVMV, Kanchipuram, Tamilnadu since 06-07-2012.

No. of papers published in National/International Journals-8

No. of papers presented in National/International Conference-16

No. of seminars/workshops/conferences attended- 72

No. of seminars/workshops/conferences organized: 4

Dr.T.N.Kavitha



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: tnkmaths@gmail.com

Name : Dr. T.N. KAVITHA

Father's Name : T.D. NARAYANASAMY

Husband's Name : P. Chandramohan

Date of Birth : 30. 07. 1974

Address for correspondence : **T.N. KAVITHA**
Assistant Professor
Dept., of Mathematics
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India
Mobile Number: +91 9952112346;
+91 9952124112

Permanent Address : T.N.KAVITHA
W/O P. CHANDRAMOHAN
48 Vallal Pachaiyappan Street,
Kanchipuram., Pin: 631 501, India

Aadhar No. : 448117842146

PAN No. : ATKPK7564L

Educational Qualifications:

- Ph.D in Mathematics, entitled '**Semigroups With Special Algebraic Structures**'

SCSVMV University, Enathur, Tamilnadu, India, (viva 25.10.2016)., October 2016.

- M.Phil. In Mathematics, **First class with distinction**, Periyar University, Salem, 2007
- Master of Science in Mathematics, Arignar Anna Arts And Science College, Cheyyar, University of Madras, Chennai, 2006.
- Bachelor of Science with **First Class**, Arignar Anna Arts And Science College, Cheyyar, University of Madras, Chennai, 1994
- Bachelor of education with **First Class with distinction**, Arulmigu Meenakshi Amman College Of Education, Uttiramerur, University Of Madras, Chennai, 2008
- Board of Intermediate Education with **First Class**, Cheyyar, T.V.Malai Dt, Tamilnadu, 1987
- Board of Secondary Education with **First Class**, Cheyyar, T.V.Malai Dt, Tamilnadu, 1985.

Professional Experiences:

1. Worked as a Assistant Professor & Head of the department of Mathematics at Sri Sankara Arts and Science College, Enathur, Kanchipuram, during the period, 6.6 .2008 to 15.07. 2012, 4 years
2. Worked as a PGT Assistant, Mathematics, M. L. M. Mamalan Matriculation School, Kanchipuram, during the period, 1.1. 2005 to 30.05. 2008, 3 years
3. Worked as a PGT Assistant, Mathematics, Infant Jesus metric hr. sec.school, Kanchipuram, during the period, 30.5.2004 to 25.5.2005, 1 year
4. Worked as a Principal, Sengunthar Matriculation School, Cheyyar, during the period, 1.6.1996 to 2.5.2004, 8 years
5. At present working as an Assistant Professor of Mathematics at SCSVMV University, Kanchipuram, Tamilnadu since 18-07-2012.

No. of papers published in National/International Journals-18

No. of papers published in National/International conference proceedings-18

No. of papers presented in National/International Conference-22

No. of seminars/workshops/conferences attended-81

No. of seminars/workshops/conferences organized:2

No. of invited talks delivered: 10

No of books published-1

No. of M.Phil Scholars guided-17

Dr. A.Gayathri



Assistant Professor
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: gayatarun@gmail.com

Name	:	Dr.A.GAYATHRI
Designation	:	Assistant Professor (Stage-I)
Date of Joining(SCSVMV)	:	03.09.2010 (First joined - to 2013)
	:	21.07.2014 (Rejoined)
Total Teaching Experience	:	10 years
• In SCSVMV	:	07 years
• TNAU	:	03 years
Specialization	:	Mathematical Physics
Awards received	:	Silver Medalist (M.Phil - 2004)
	:	Best Paper Award (Int.Conf. - 2017)
7. M.Phil Guidance	:	03
8. No. of handling years	:	12
9. Permanent Address	:	N0.24, Arignar Anna nagar , Rajaji Salai, Vaiyavoor Road , Kanchipuram - 631561

Academic Details:

- Completed **Ph.D** Mathematics, Sri Chandrasekherendra Saraswathi Viswa Mahavidhyalaya (SCSVMV) during **2014-2017**. [Part time]
- Secured **FIRST class** in **M.Phil., Mathematics**, Madurai Kamaraj University during **2003 – 2004**. [Silver medal]
- Secured **FIRST class** in **M.Sc., Mathematics**, Madurai Kamaraj University during 2001-2003
- Secured **FIRST class** in **B.Sc., Mathematics**, Madurai Kamaraj University during 1998-2001.

Academic Experience:

- Working as Assistant Professor of Mathematics at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya [SCSVMV], Enathur, Kanchipuram since **July 2014**.
- Worked as **Assistant Professor of Mathematics** at Ramco Institute of Technology, Rajapalayam, from **July 2013 to Dec 2013**.
- Worked as **Assistant Professor in Mathematics** at Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya [SCSVMV], Enathur, Kanchipuram, from **Sep 2010 to May 2013**.
- Worked as Senior Research Fellow in **Govt. Agricultural College and Research Institute**, Killikulam, Vallanad – 628 252, Tuticorin District under Tamil Nadu Agricultural University from **Sep 2005 to Apr 2008**.

Manuals Prepared:

- Mathematics for Agricultural Sciences
- Introduction to Computer Technology
- Computer Applications
- Communications and Information Technology
- Agricultural Statistics
- Workshop Manual – MegaStat
- Lab Manual –Excel Solver

No. of papers published in National/International Journals-11

No. of papers published in National/International conference proceedings- 3

No. of papers presented in National/International Conference-9

No. of seminars/workshops/conferences attended- 38

No. of seminars/workshops/conferences organized - 2

No. of programs acted as resource person – 3

Ms. B. AMUDHA



Teaching Assistant of Mathematics
SCSVMV University,
Enathur, Kanchipuram- 631 501
9894566727

Educational Qualifications:

- Doing Ph.D in SCSVMV University, Enathur.
- M.Phil in Mathematics with First Class, SCSVMV University, Enathur, 2012.
- M.Sc in Mathematics with First Class, Ramanujan Institute for Advanced Study in Mathematics, Madras University, Chennai, 2010.
- B.Ed in Mathematics with First Class, Cholan College of Education, Madras University, Kancheepuram, 2008.
- B.Sc in Mathematics with First Class, Pachaiyappa's College for women, Madras University, Kancheepuram, 2007.

Professional Experiences:

- At present working as an Teaching Assistant of Mathematics at SCSVMV University, Kancheepuram, since AUG 2017
- Worked as Assistant Professor of Mathematics in Sri Sankara Arts and Science College, Enathur, Kancheepuram since NOV 2012 to JULY 2016.

- Worked as Maths Teacher in SSKV Matriculation Hr. Sec School, Kancheepuram since JUNE 2010 to NOV 2012
- No. of papers presented in National/International Conference-01
- No. of seminars/workshops/conferences attended-05

Mr. K. SARAVANAN



Teaching Assistant of Mathematics
SCSVMV,
Enathur, Kanchipuram- 631 501
9943789515, kadirvelsaravanan@gmail.com

Educational Qualifications:

- M.Phil in mathematics with second class, RKM Vivekananda college, University of Madras.
- M.Sc in Mathematics with First Class, RIASM, University of Madras.
- B.Sc in Mathematics with Second Class, Periyar Arts college, University of Madras.

Professional Experiences:

- Working as Teaching Assistant of Mathematics at SCSVMV U, Kanchipuram since August 2017
- Worked as Asst. Professor in Mathematics Department from JULY 2012 to July 2017, at Pallava Raja College of Engineering, Near Kanchipuram
- Worked as a Lecturer in Mathematics Department from NOV 2011 to MAY 2012, at The New Royal College of Engineering and Technogoly, Near Mamallapuram.
- Worked as a Lecturer in Mathematics Department from OCT 2007 to NOV 2011, at Arulmigu Meenakshi Amman College of Engineering, Near Kancheepuram.
- Worked as a Lecturer - Mathematics Department from NOV 2006 to OCT 2007 at Thiruvalluvar College of Engineering and Technology, Near Vandavasi,

No. of papers presented in National/International Conference-2

No. of seminars/workshops/conferences attended-4

Ms. A. SHAKILA



- M.Phil in Mathematics with First Class, SCSVMV University, Enathur, 2012.
- M.Sc in Mathematics with First Class, Pachayappa's Collage For Women. Madras University, Kanchipuram. 2009
- B.Sc., in Mathematics with third Class, Pachayappa's College For Women ,Madras University, Kancheepuram, 1999..

Professional Experiences:

- At present working as an Teaching Assistant of Mathematics at SCSVMV University, Kancheepuram, since AUG 2017 to till date.
- Worked as Assistant Professor of Mathematics in Sri Sankara Arts and Science College, Enathur, Kanchipuram since AUG 2012 to FEB 2017..
- Worked as Maths Teacher in Sundar Mission Matriculation Hr. Sec School, Kanchipuram since JUNE 2008 to Mar 2009.
- No. of papers presented in National/International Conference-1
- No. of seminars/workshops/conferences attended-11
- No. of online FDP-5
- No. of online workshop- 3
- No. of online National/International Conference-2

Mrs. P. Revathi



Teaching Assistant
Department of Mathematics,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,
SCSVMV, Enathur, Kanchipuram 631561.
Phone (Office): +91 44 27264301/308 Ext:231
E-mail: rev.poov@gmail.com

Name : Mrs. P. REVATHI
Father's Name : M. POOMALAI
Husband's Name : T. THIRUKUMAR
Date of Birth : 12. 04. 1987
Nationality : Indian
Religion : Hindu
Address for correspondence : **P. Revathi,**
Teaching Assistant,
Dept., of Mathematics,
SCSVMV University,
Enathur,
Kanchipuram- 631 561,
Tamilnadu, India.
Mobile Number: +91 8973866409;

Educational Qualifications:

- M.Phil. in Mathematics, **First class with distinction**, Annamalai University, Chidambaram, 2012.
- Master of Science in Mathematics with Computer Science, **First class** , Annamalai University, Chidambaram, 2010.
- Bachelor of Science in Mathematics, **First class with distinction**, D.G.Govt., Arts College for women, Mayiladuthurai, Bharathidasan University, 2008

Professional Experiences:

6. At present working as a Teaching Assistant of Mathematics in SCSVMV University,

Kanchipuram, since JUL 2018.

7. Worked as an Assistant Professor of Mathematics in Mailam Engineering College, Mailam, Tindivanam, during the period, 08.02.2012 to 31.12.2013.

No. of papers presented in National/International Conference- Nil

No. of seminars/workshops/conferences attended: 3

Ms. G. Subasri



Teaching Assistant of Mathematics
SCSVMV University,
Enathur, Kanchipuram- 631 501
9442091784, gsubhasri@kanchiuniv.ac.in

Name : G. Subasri
Father's Name : Mr. A. Gopalan
Date of Birth : 14-05-1982
Nationality : Indian
Religion : Hindu
Address for Correspondence : G. Subasri
Teaching Assistant
Dept., of Mathematics
SCSVMV University,
Enathur, Kanchipuram- 631 561.
Tamilnadu, India
Email : gsubhasri@kanchiuniv.ac.in
Permanent Address : Mrs. G. Subasri
No.4, Ezhumalai Nagar,
Vishnu Kanchi,
Kanchipuram-631 501

Educational Qualifications:

- M.Phil in Mathematics with Second Class, Annamalai University, Annamalai Nagar, 2009 (Directorate of Distance education).
- B.Ed in Mathematics with First Class, Annamalai University, Annamalai Nagar, 2007.
- M.Sc in Mathematics with First Class, Annamalai University, Annamalai Nagar, 2006.
- B.Sc in Mathematics with First Class, Seethalakshmi Achi college for women, Pallathur, Madurai Kamaraj University, 2002.

Professional Experiences:

- At present working as a Teaching Assistant of Mathematics at SCSVMV University, Kancheepuram, since July 2018
- Worked as an Assistant Professor of Mathematics in Krishnasamy College of Engineering & Technolgy, Cuddalore from 01-07-2011 to 30-04-2014
- Worked as a Maths Teacher in Subramania Bharathiar Matric Higher Secondary School, Bhuvanagiri from 01-06-2008 to 31-05-2011
- Worked as a Maths Teacher in Vivekananda Matric Higher Secondary School, Sirkazhi from 01-06-2007 to 31-05-2008

No. of seminars/workshops/conferences attended: 08

Ms. N. Meenakshi



Teaching Assistant

Department of Mathematics

SCSVMV University

Enathur, Kanchipuram - 631501

Gmail: nmeenakshi@kanchiuniv.ac.in

Mobile: 9940772334

Name : N.Meenakshi
Husband's Name : N. Janarthanan pillai
Date of Birth : 05-05-1982
Nationality : Indian
Religion : Hindu

Educational Qualifications:

- Master of Philosophy in Mathematics(2018-2019) with **First class**, Secured **9.00 C.G.P.A**
SCSVMV university, Enathur, Kanchipuram, Tamil Nadu.
- Master of Science in Mathematics (2016-2018) with **First class -Exemplary**
Secured **9.11 C.G.P.A (Madras University Rank Holder- 9 th Rank)**
University of Madras ,Vidhyasagar Womens college, Chengalpattu.
- Bachelor of Science in Mathematics with **First class** (1999-2002)
Secured **71%** ,M.S.University ,S.T.Hindu college,Nagercoil
- HSC in S .M. R. V H S S with **First class**, Vadasery, 1999
Secured **80.91%** .
- SSLC in S.M.R. V H S S with **First class**, Vadasery,1997
Secured **84%**

Professional Experience:

At present working as an Teaching Assistant of Mathematics at SCSVMV university, Kanchipuram , since 16, July- 2019

No. of papers published in National/ International journals : 2

No. of papers presented in National/International conference : 2

No. of Seminars/Workshops/conferences attended : 6

No. of Faculty Development Program Attended : 4

No. of Webinars attended : 26

Remedial Measures

Staff Members often identify the students who are having less knowledge in Mathematics and scored very less marks in unit test and internal test. After identifying those students, they were called to cabins for discussion regarding their poor performance. At the time of discussion with each student in person, the remedial measure that to be followed for the improvement of their marks in upcoming test and external examinations and the ways to improve the basic level of knowledge in mathematics is clearly pictured out.

First, the students are asked to study some basic level books on the respective topics, so that they feel free and come forward to study with interest. Also hand-outs are given to students for better understanding. Finally, the students are insisted to go through their topic thoroughly and come back to the teachers in case of any difficulty, so that the students can get clear cut explanations on the respective topics. Later, enough number of problems in all chapters is given for practice.

Apart from this, some general remedial measures as mentioned below is also followed:

- ❖ Important questions expected at the end-semester examination are identified and given to students.
- ❖ Previous year question papers and solutions, if needed, are given to them.
- ❖ Assignments are given on important topics.

Infrastructure Details - 2019-2020

Sl.No.	Item Name	Quantity
1	Computers - Monitors	14
2	Computers – CPU	14
3	Computers - Mouse	14
4	Computers - Keyboard	14
5	Printers	6
6	Computer tables	8
7	LCD Projectors	2
8	Staff tables	24
9	S type chairs	11
10	Cushion chairs	1
11	Cushion rolling chairs	7
12	Plastic chairs	22
13	Pad chairs	2
14	Steel racks (closed)	3
15	Steel racks small	6
16	Steel racks big	1
17	Almirah small	10
18	Almirah big	3
19	Almirah with glass	7
20	Four seater (sitting desk)	1
21	Two seater (writing desk)	2
22	Two seater (sitting desk)	14
23	Small steel stools	7
24	Big steel stools	1
25	Wooden stools	1
26	Whiteboards	1
27	Department Name boards	1
28	Pedestal fans	5
29	Ceiling fans	21
30	Ceiling Lights	18
31	Tube light s	10
32	Window AC	1
33	Wall speakers	2
34	0.5 KVA UPS (HOD)	1
35	Exide Battery (LAB)	10
36	Consul UPS (LAB)	1
37	Wall clocks	1
38	Telephones	2
39	Dustbins	3

40	Water dispensers	1
41	Fire Extinguishers	4
42	Mirrors	2

Library Book Details

Sl. No.	Accn. No	Title	Author
1.	55205	Modern Methods of Teaching Mathematics	Shalini Wadhwa
2.	62624	A Text Book of Practical Mathematics	I.B. Prasad
3.	62995	Problem Solving Strategies	Engel
4.	Spec. Copy	System Programming and Operating Systems	D.M. Dhamdhare
5.	64358	A Primer of Mathematical Writing	Steven G. Krantz
6.	64906	Standard Mathematical Tables and Formulae	Daniel Zwillinger
7.	65094	Graded Exercise in Pure Mathematics for AS and A2	Barrie Hunt
8.	65202	Mathematical Conservations	Wilson Gray
9.	68472	Teaching and Assessing Skill in Mathematics	Audrey Simpson
10.	66973	How to solve it	G. Polya
11.	67705	What is Mathematics?	Courant/Robbins/Stewart
12.	68417	The Philosophy of Mathematics Today	Schirn
13.	68418	Story of Number	Eli Maor
14.	68420	Fun and Fundamental of Mathematics	Jayant V. Narlikar
15.	68423	Adventures in Problem Solving	Shailesu Shirali
16.	68424	Applicable Mathematics at the Golden age	Misra
17.	68939	All the Mathematics You Missed	Garrity
18.	68968	Hand Book of Mathematics	In Bronshtein and Co
19.	69689	Think Without Ink	Venkataraman
20.	69708	Test of Reasoning	Edgar Thorpe
21.	69710	General Intelligence for Students	B. James
22.	69725	Quick Arithmetic	Asish Agarwal
23.	69764	GRE Math Subject Test	Steven A Leduc
24.	69827	Quantitative Aptitude	R.S. Agarwal
25.	69830	Math for Smart test takers	Mark Alan
26.	78265	Vedic Mathematics	Jagathkuruswamy
27.	95684	The Mathematical Century	Piergiorgio Odifreddi
28.	95685	Mathematical Olympic at challenges	Titu Andreescu & Razvan Gelca
29.	95698	Mathematics in Nature	John A. Adam
30.	96097	Dictionary of Mathematics	Mcgraw-Hill
31.	99072	Mathematical control theory	Jerzy/ Zabczyk

32.	99194	The world of Mathematics Vol. 1	James Newman
33.	99195	The world of Mathematics Vol. 2	James Newman
34.	99196	The world of Mathematics Vol. 3	James Newman
35.	99197	The world of Mathematics Vol. 4	Newman
36.	Spec. Copy	Practice of Bakthi Yoga	Sri Sivananda Saraswathi
37.	101408	Technical Analysis and Applications with MATLAB	William D. Stanley
38.	69720	Objective General Science	2001 Edition
39.	Spec. Copy	Vedanta in Daily Life	Sri Sivananda Saraswathi
40.	111087	Stories about Maxima and Minima	V.M. Tikhomirov
41.	112266	A First course in Finite Elements Methods	Daryl. L. Logan
42.	Spec. Copy	Bramha Sutras	Sri Sivananda Saraswathi
43.	Spec. Copy	System software	Leland. L. Beck
44.	119074	Vedic Mathematics for School Book - 2	Glover
45.	119132	A problem book in Mathematics	S. K. Goyal
46.	119155	Dictionary of Mathematics	V.P. Jaggi
47.	66593	Fuzzy logic with Engineering Applications	Timothy J Ross
48.	68460	Fuzzy Topology	N. Pazaniyappan
49.	100084	Fuzzy Logic	Timothy J. Ross
50.	104732	Fuzzy Sets & Fuzzy Logic	Klir/Yual
51.	104782	Fuzzy Logic	Timothy J. Ross
52.	106251	Fuzzy Sets & Fuzzy Logic	Klir/Yual
53.	126592	Fuzzy Topology	N. Pazhaniappa
54.	126828	Fuzzy Logic	Timoto J. Ross
55.	25455	Modern Algebra	A.R. Vasantha
56.	54744	Matrix Theory	David W. Lewis
57.	54991	Group Theory	M. Suzuki
58.	58865	Applied Abstract Algebra	Rudolf Lidl
59.	61872	Exercises in Classical Ring Theory	Lam
60.	61874	Algebra	Serge Lang
61.	62896	An introduction to Ring Theory	Cohn
62.	64305	The first course in Non-commutative rings	Lam
63.	64308	Matrix Analysis	Rajendra Bhatia
64.	65417	Jordon Algebra and Algebraic Graphs	Springer
65.	67960	Local algebra	Serre

66.	67961	Algebraic Curves, Algebraic Manifolds & Schemes	Danilov /Shokurov
67.	67962	Glimpses of Algebra and Geometry	Toth
68.	68436	Linear Algebra	Hoffman/Kunze
69.	68437	Linear Algebra	Kumaresan
70.	68450	A First Course in Abstract Algebra	Fraleign
71.	68455	Topics in products of Random Matrices	Mukherje. A
72.	68941	Basic Abstract Algebra	P.B. Bhattacharya
73.	68942	Basic Algebra	Cohn
74.	69349	Commutative Algebra	Zariski and Samuvel
75.	96082	Linear Algebra	Friedberg/Arnold J. Insel
76.	96083	Linear Algebra	Kwak/Hong
77.	99082	Matrix Method an Introduction	Richard Bronson
78.	99084	Modern algebra an introduction	Durbin
79.	104719	Algebra	M. Artin
80.	104734	Matrix and Linear Algebra	Datta
81.	104739	Topics in Algebra	Herstein
82.	104779	Field Theory	Luthar Passi
83.	104805	Introduction to Rings & Modulus	Musili
84.	104807	A first course in Abstract Algebra	Fraleigh
85.	109710	Modern Algebra	Surjeet Singh/ Qazi Zameeruddin
86.	Dept Copy	Modern Algebra	Surjeet Singh
87.	Dept Copy	Modern Algebra	Surjeet Singh
88.	108994	Artificial Intelligence	Nilssan
89.	101042	Introduction to Artificial Neural System	Zurada
90.	109000	Fundamentals of Artificial Neural Networks	Hassoun
91.	112913	Artificial Intelligence	Stuart Russel/ Peter Norving
92.	112959	Artificial Intelligence	Elaine Rich and Kevin Knight
93.	64817	An introduction to Formal Languages & Automata	Peter Linz
94.	65079	Automata Theory and its application	Bakhadyr Khousainov
95.	95368	Automata Theory	Siman
96.	95725	Automata and Language Theory and Application	Alexander Meduna
97.	95759	Elements of Theory of Computation	Harry R. Lewis Christos H. Papid
98.	95907	Introduction to Languages and the Theory of Computation	John C. Martine

99.	99000	An introduction to Formal Languages & Automata	Peter Linz
100.	99300	Introduction to Automata Theory and Languages Computation	Hopcroft/Motwani/Ullman
101.	104762	Introduction to Automata Theory and Languages Computation	Hopcroft/Motwani/Ullman
102.	104803	Introduction to Automata Theory and Languages Computation	John E Hopcraft/Jeffery D Ullman
103.	106240	Automata Theory, Languages and Computation	Hopcroft / Motwani / Ullman
104.	106288	Theory of Computer Science, Automata Languages & Computation	K. L. P. Mishra/Chandrasekaran
105.	119033	Theory of Computations	J.C. Hopcraft
106.	119084	Introduction to Automata and Compiler Design	Dasaradh Ramaiah
107.	120188	Introduction to Languages and the Theory of Computation	John C. Martine
108.	122650	Formal Languages and Automata	Peter Linz
109.	125658	Finite Automata and Functional Languages	Padma Reddy
110.	1	Fuzzy Logic Toolbox	
111.	40285	Mastering MATLAB	Hanselman/Littlefield
112.	40286	Kalman filtering	Grewal and Andrews
113.	65034	Kalman Filtering Theory & Practice Using MATLAB	Mohinder S.Grewal
114.	95442	MATLAB and Introduction to Applications	Gilate
115.	110788	MATLAB Demystified	K.K. Sharma
116.	111283	Practical MATLAB Basics for Engineers	Misza Kalechman
117.	111284	Practical MATLAB Applications for Engineers	Kalechman
118.	113023	Numerical Technique Lab: MATLAB based Experiments	K.K. Mishra
119.	7240	Foundations of Complex Analysis	S. Ponnusamy
120.	62871	A panorama Harmonic Analysis	Steven G Krantz
121.	66984	An imaginary table: The story of Root of -1	J. Nahin
122.	68419	Introduction to Analytic Theory	Apostol
123.	68451	Complex Variables	Mark. J. Ablowitz Athanassios
124.	68453	Complex Analysis	V. Karunakaran
125.	68454	Complex Analysis	V. Karunakaran
126.	68457	Functions of one Complex Variable	John B. Conway
127.	68458	Functions of one Complex Variable	John B. Conway
128.	69345	Classical topics in Complex Function Theory	Reinhold Remmort
129.	69351	Harmonic analysis & Application	John .J. Bnedetto
130.	77235	Theory of Function	Konrad Kropp

131.	95741	Complex Variables & Applications	James Ward Brown and V. Churchill
132.	99151	Real and Complex Analysis	Rudin
133.	102133	Complex Analysis	John. H. Mathews/Russel. W. Howell
134.	102138	Complex Analysis	John H. Mathews
135.	104758	Complex Analysis	S. Arumugam
136.	104804	An introduction to Differentiable Manifolds and Riemann Geometry	William. M. Boothby
137.	104806	Introduction to Analytic Theory	Apostol
138.	111083	Problems in Real & Complex Analysis	Bernard R. Gelbaum
139.	124067	Fundamentals of Complex Analysis	E.B. Soff
140.	126567	Complex Analysis for Mechanical Engineering	John E. Mathews
141.	55705	Discrete mathematical structure with application to C.S	J. P. Tremblay/Manohar
142.	54725	Applied combinatorics	Alan Tucker
143.	54987	Discrete mathematics with applications	S. Epp
144.	54995	Algorithms And Classification In Combinatorial Group Theory	G. Baumslag/Miller
145.	62539	Discrete Mathematics	B. S. Vatssa
146.	64311	Discrete Algorithmic Mathematics	Stephen B. Maurer Antony
147.	64311	Discrete Algorithmic and Mathematics 2	Stephen B. Maurer Anthony Ralston
148.	64315	Introduction to Mathematical Structures & Proofs	Larry J. Gerstein
149.	65759	Discrete Mathematics.	V. Sunderesan
150.	66304	A Course In Combinatorics	Vanliut and Wilson
151.	66419	Applied Discrete Structures for Computer Science	Alan Doerr / Keneth Levasseur
152.	67278	Discrete Mathematics	Lovasz / Pelikan/ Vesztergombi
153.	68430	Discrete Mathematics	Iyengar
154.	68442	Discrete and Combinatorial Mathematics	Ralph P. Grimaldi
155.	68467	Combinatorial Optimisation	M. M. Shikare/Bn Waphare
156.	69309	Discrete Mathematics for Computer Scientists	Truss
157.	99047	Discrete Mathematics	Johnson Baugh
158.	99051	Discrete mathematical structure	Kolman /Busby/Ross/ Rehman
159.	99304	Introduction to logic	I.M. Copi/Cohean
160.	100534	Introduction to logic	I.M. Copi/Cohean
161.	104818	Discrete Maths	Kolmann Bushy Rose
162.	106615	Combinatorics & Graph Theory	J. M. Harris

163.	119091	Discrete Mathematics	Chakraborty/ Sarkar
164.	119102	Discrete Mathematics	Balaji
165.	119123	Mathematical Foundation of Computer Science	Shahuaz Bathul
166.	120208	Discrete Mathematics	Babu Ram
167.	58405	2000 Solved problems in Discrete Mathematics	Schaum's Series
168.	40739	Engineering Maths Vol. 1	A. Kandasamy and Thilagavathy
169.	40813	Engineering Maths Vol. 2	A. Kandasamy
170.	55519	Engineering Maths	M. K. Venkatraman
171.	57261	Engineering Maths Vol. 3	A. Kandasamy and K. Thilagavathy
172.	58294	Mathematical Methods for Engineers and Physicists	A.K. Mukhopadhyay
173.	65826	Engineering Maths Vol. 4	T. Veerarajan
174.	68445	Engineering Mathematics	V. Sundaram / Balasubramaniam / Lakshmi Narayanan
175.	69346	Algorithms for Discrete Fourier transform & Convolution	Richard Tolimien/Myoung Anchaolu
176.	95713	Applied Mathematical Methods	B. Dasgupta
177.	97914	Higher Engineering Maths	B.S. Grewal
178.	101656	An introduction to Laplace transform & Fourier Series	P.P.G. Dyke
179.	101672	Difference Equations	Walter. G. Kelley
180.	101714	Engineering Maths Vol. 3	T. Veerarajan
181.	104742	Engineering Maths Vol. 3	T. Veerarajan
182.	104788	Engineering Mathematics Vol. 1	S. S. Sastry
183.	106232	Engineering Maths	S. S. Sastry
184.	106249	Engineering Mathematics	T. Veerarajan
185.	110989	Signal Systems and Transforms	C. L. Philips/Parr/Riskil
186.	111164	Mathematical methods	G. Sankar Rao and E. Kesava Reddy
187.	119108	Engineering mathematics Vol. 2	A.C. Srivastava and P.K. Srinivasan
188.	119115	Engineering mathematics Vol. 4	M. C. Mohan / Philip/ Jacob/ Shetty
189.	119116	Engineering mathematics Vol. 2	M. Chandra Mohan/Varghese/Philip
190.	119129	Transforms & PDE	A. Singaravelu
191.	119156	Transforms & PDE	G. Balaji
192.	124088	Mathematical Methods	T. Veerarajan
193.	124110	The Fourier transform and its applications	R.N. Bracewell
194.	127273	Engineering Mathematics (Vol. I and II)	T. Veerarajan
195.	127298	Transforms and PDE	K. Vairamanickam

196.	Spec. Copy	A Text Book of Engineering Mathematics	N.P. Bali Manish Goyal
197.	119153	business mathematics	D.R. Aggarwal
198.	Spec. Copy	Engineering Mathematics	A. K. Thilakavathy and Gunavathy
199.	Dept. Copy	Engineering Mathematics	S. Sankarappan and S. Kalavathy
200.	Spec. Copy	Higher Engineering Mathematics	B.S. Grewal
201.	99218	Vector Calculus, Fourier Series and Fourier Transforms	S. Sankarappan
202.	Spec. Copy	Engineering Mathematics	Rajkumar and Roy Chowdry
203.	Dept Copy	Engineering Mathematics	V. Sundaram
204.	Spec. Copy	Engineering Maths	T. Veerarajan
205.	Spec. Copy	Engineering Maths	T. Veerarajan
206.	53525	An introduction to Mathematical Modeling	Fowkes maholy
207.	54997	Curve and Surface in Geometric Modeling	J. Galleir
208.	62866	Nature of Mathematical Modeling	Neil Gershenfeld
209.	64313	Elementary Mathematical Model	G.D. Kalmal
210.	96015	Mathematical Modeling	J.N. Kapoor
211.	99074	Mathematical Modeling	Bimal K. Mishra
212.	99284	Mathematical Modeling	D. Edward and Hamsan
213.	105715	Theory of Modeling and simulation	Zeigler/ Praehofer/Kim
214.	64321	Random Graphs	B. Bollobas
215.	64315	Introduction Mathematical Structure and Proofs	Gerstein
216.	65080	Algebraic Graph Theory	C. Godsil / Royle
217.	65088	Digraphs theory algorithms and applications	Jorgen Bang / Jensen
218.	65427	Graph Theory & Its Application	Jonathan Gross, Jay Yellen
219.	65444	Pristine Transfinite Graphs and Permissive Electrical Networks	Zemanian
220.	65526	Introduction to Graph Theory	Robin J. Wilson
221.	65771	Graph Theory	Narasingh Deo
222.	68415	Graphs, Combinatorics, Algorithms and applications	S. Arumugam/B.D. Acharya/S.B. Rao
223.	68440	Graph theory and its applications	G.K. Ranganath
224.	68462	A Text Book of Graph theory	R. Balakrishnan
225.	68463	Graph theory	Harary
226.	68464	Graph Theory	Harary
227.	95679	Graph theory	Reinhard Diestel

228.	99296	Introduction to graph Theory	Robin J. Wilson
229.	125357	Graph Theory	Narasingha Deo
230.	10092	Classical mechanics	H. Goldstein
231.	53519	An introduction to the mathematical theory of Havier-Strokes equations	G.G.P Galdi
232.	68421	Tensor Calculus	U. C. De
233.	95376	Classical mechanics	K. N. Srinivasa Rao
234.	104825	Tensor Calculus	David Kay
235.	107562	Introduction To Classical mechanics	David Morin
236.	110965	Classical mechanics	Goldstein Pook Sofko
237.	110968	Neural networks using MATLAB	S.N. Sivanandam/S.Sumathi/S.N.Deepa
238.	103477	Neural networks	Sathish Kumar
239.	112367	Introduction to neural networks, Fuzzy Logic and Genetic Algorithm	Sudharsan K. Valluru/ Nageshwara Rao
240.	61869	Numerical Solution of P.D.E	G.D. Smith
241.	62518	Applied Numerical Analysis	C.F. Gerald/ Wheatley
242.	66745	Block Error - Correcting Codes	Xambo-Descampes
243.	68426	Practical Numerical Analysis Using MS-Excel	A. Nandy
244.	68427	Numerical Methods for Engineers And Scientists	J.N. Sharma
245.	68470	Fundamentals of Approximation Theory	H.N. Mhaskar/Pai
246.	68989	Rational Points on Elliptic Curves	J.H. Silverman/Tate
247.	69348	The Graduates Students Guide to Numerical Analysis	M. Ainsworth/Levesley/Marletta
248.	69352	Conservation Finite Difference Methods on General Grids	M. Shashkor
249.	95719	Applied numerical methods using MATLAB	W.Y. Yang/Cao/Chung/Morris
250.	96433	Applied Numerical Analysis	Gerald/ Wheatley
251.	97049	Theory and Application of Numerical Analysis	Phillips and Taylor
252.	99006	Applied Numerical Methods with MATLAB	P.C. Chapra
253.	99109	Numerical Analysis	G. Shankar Rao
254.	99255	Error correction and coding	Todd. K. Moon
255.	99927	Applied numerical methods using MATLAB	W.Y. Yang/Cao/Chung/Morris
256.	104757	Introductory Methods of Numerical Analysis	S.S. Sastry
257.	104775	Numerical Methods	T. Veerarajan
258.	106262	Introductory Methods of Numerical Analysis	S.S. Sastry
259.	106267	Numerical Methods	E. Balaguruswamy
260.	119131	A Text Book of Statistical and	P. Sivarama Krishna Dhas

		Numerical Methods	
261.	119135	Numerical Analysis	Francis Scheid
262.	122984	Numerical Methods	P. Kandasamy
263.	124046	Analysis of Linear Systems	David k. Cheng
264.	124096	Numerical Analysis	R.L. Burden
265.	125079	Concepts and Applications of Finite Elements Analysis	Robert D. Cook
266.	125113	Introduction to the Finite Elements Method	Desai / Abel
267.	125205	The Finite Elements Method in Engineering	Singiresu S. Rao
268.	125679	Numerical Methods with C++Programming	N.H. Saha
269.	127256	Rational Points and Elliptic Curves	J.H. Silverman
270.	127267	Introductory Methods of Numerical Analysis	S.S. Sastri
271.	127292	Introduction to the Finite Elements in Engineering	T.R. Chandrupatla
272.	Spec. Copy	Numerical Methods For Science and Engineering	Radha Kanka Sarkar
273.	Spec. Copy	Numerical Methods	M.K. Venkataraman
274.	40251	Operations research	A.Taha
275.	45276	Elements of queueing theory	Thomas L saaty
276.	56156	Introduction to operation research	Billy. E. gillett
277.	61378	Introduction to operation research	Hillier Lieberman
278.	68425	Optimization	M.C. Joshi / Moutgalya
279.	68428	Principles of optimization theory	G.R. Bector / Chandra/Dutta
280.	95796	Introduction to operational research	C.R. Kothari
281.	97656	Engineering optimization(Theory & Practice)	Singiresu S. Rao
282.	98051	Operation Research	P.K. Gupta / Manmohan Kanti Swarup
283.	98693	Optimization of Stochastic Systems	Masanao Aoki
284.	99115	Operation research	H.A. Taha
285.	99118	Operation research (principles and practice)	Ravindran/ philips /Solberg
286.	99276	Fundamentals Of Queuing Theory	Donald Gross / Hanres
287.	100528	Linear Programming	L.N. Vaserstein
288.	106258	Operation research Concepts and cases	Frederik S. Hillier / Gerald J. Lieberman
289.	106269	Operation Research	A. Taha
290.	106285	Operations Research Vol. 2	Richard Bronson / Govindasamy Nodimuthu
291.	119036	Operational Research	N. Ramanathan

292.	104717	Operation Research an Intro	H. Taha
293.	120173	Operation Research	W.V.R. Naidu / Rajendra /Krishna Rao
294.	125526	An Introduction to Game Theory	M.J. Osborne
295.	54777	Theory of O.D.E	Earl A. Coddington and Levinson
296.	54796	Elements of P.D.E	Ian Sneddon
297.	54992	Linear Integral Equations	R Kress
298.	58790	Partial Differential Equations	Jeffrey Rauch
299.	58792	Applied P.D.E's	J. David Logan
300.	62895	Applied Partial Differential Equations	John Ockendon/Howison
301.	68083	Theory of O.D.E	Earl A.Coddington and Levinson
302.	68950	Differential Equations	A.C.King and J. Billingham
303.	68951	Differential Equations	A.C.King and J. Billingham
304.	68981	Lectures on P.D.E	Vladmir Arnold
305.	94837	Options, Futures and Other Derivatives	Hull
306.	100871	P.D.E Methods and Applications Vol. 2	Robert C. Mcowen
307.	106940	Non-linear O.D.E	P.W. Jordon and P. Smith
308.	110967	Ordinary Differential Equations	Purna Chandra Biswal
309.	111045	Linear Partial Differential Equations	Tyn Myiut-U.Debnath
310.	111065	An introduction to PDE with MATLAB	Matthew P. Coleman
311.	119075	Special Functions	George E. Andrews/ Askey/Roy
312.	119095	Transform and PDE	T. Veerarajan
313.	111254	Simulation and Interference for Stochastic D.E	M. Lacus
314.	1558	Random point processer	Donald. L. Snyder
315.	6052	Statistical Methods	S.P. Gupta
316.	44700	Probability and Random Processes for Electrical Engineering	Alberto Leon and Garcia
317.	46969	Probability and Random Processes for Electrical Engineering	Alberto Leon and Garcia
318.	53506	Stochastics Process	J. Medhy
319.	54580	Standard Probability and Statistical Table and Formulae	Daniel Zwillinger/Stephin Kokoska
320.	63980	Statistical Methods	J. Medhi
321.	64350	Measure Theory and Probability	A.K. Basu
322.	64354	Stochastic D.E and Applications	Xuerong Mao
323.	65729	Probability, Statistics and Random Processes	T. Veerarajan
324.	65863	Introduction to Mathematical Statistics	Robert. V. Hogg /Allen .T. Craig

325.	65981	First Step in Statistics	Daniel B. Wright
326.	66416	Probability, Statistics and Random Processes	T. Veerarajan
327.	66485	Probability Essential	Jean Jacod Philip and Protter
328.	66963	Probability Random Variable and Stochastic Process	Athanasios Papoulis
329.	66978	A Course In Distribution Theory and Applications	R.S. Pathak
330.	68416	Industrial Mathematics and Statistics	J.C. Misra
331.	68432	Sampling Theory and Methods	S. Sampath
332.	68433	Sample Survey Theory	Des Raj Promod
333.	68434	Applied Multivariate Statistical Analysis	Richard A. Johnson
334.	68439	Practical Mathematical Statistics	H.C. Saxena
335.	68448	Probability Theory	Heinz Bauee Meinz
336.	68449	Introduction to Stochastic Process	A.H. Basu
337.	68452	A course in Distribution Theory and Application	R.S. Pathak
338.	68987	Probability Through Problems	Marek Capinski/tomasz zastawniak
339.	95669	Probability Basic Stochastic Process	Zdzistar Brzezniak
340.	95723	Applied Statistics and Probability for Engineers	A Douglas C. Montgomery / Gorgr C. Runger
341.	96076	Introduction to Time Series and Forecasting	Brackwell/Davis
342.	96123	Probability, Random Variables and Random Processes	Hwei Hsu
343.	99009	Fundamental Probability and Random Processes	Oliver C. Ibe
344.	99138	Probability and Statistics	Mendenhall/Beaver
345.	99156	Sampling Techniques	Cochran
346.	104729	Mathematical Statistics with Application	Miller Freund's
347.	104760	Multivariate Analysis and Application	Bhuyan
348.	104793	Probability Statistics and Random Processes	T. Veerarajan
349.	104799	Elementary Probability Theory with Stochastic Processes	Kai Lai Chung
350.	106247	Elementary Probability Theory with Stochastic Processes	Kai Lai Chung
351.	106274	Probability and Statistical Inference	Hogg/Tanis Rao
352.	106284	Probability Statistics and Random Process	T. Veerarajan
353.	106612	Probability Random Variables and Random Signals Principles	Peyton Z Peebles

354.	107933	100 Statistical Tests	Gopal. K. Kanji
355.	111066	Introduction to Probability	Charles M. Grinstead/J.Maurie Snell
356.	111171	Statistical Methods	H.C. Taneja
357.	111251	A Model Approach to Regression with R	Simon J. Sheather
358.	111253	Applied Statistics	P.N. Majumdar
359.	111254	Simulation and Inference for Stochastic De	Stefano M. Lacus
360.	111574	Probability Statistics	Schaum's Series
361.	119109	Statistics and Numerical Methods	A. Singaravelu
362.	119124	Probability and Random Processes	S. Palaniammal
363.	120204	Fundamental Probability and Random Processes	Oliver C. Ibe
364.	120211	Probability Random variable and Stochastic process	T. Veerarajan
365.	120213	An introduction to Statistical Methods	C. B. Gupta/Vijay Gupta
366.	122620	Probability and Statistics for Engineers	R.A. Johnson
367.	127334	Probability and Statistical Inferences	Hogg
368.	Spec. Copy	Probability , Statistics And Queuing Theory	A. Kandasamy and K. Gunavaathy
369.	99137	Probability And Measure Theory	Robert B. Ash
370.	Dept Copy	Basic Stochastic Process	Tomasz
371.	Dept Copy	Probability Theory	Heinz Bauer
372.	111756	Probability Statistics	Kishor. S. Trivedi
373.	59340	Methods of Real Analysis	Richard R. Goldberg
374.	59343	Methods of Real Analysis	Richard R. Goldberg
375.	61849	Principles of Real Analysis	D.Aliprantis/Owen Burkinshaw
376.	64316	A Course on Borel Sets	S.M. Srivastava
377.	68444	Real Analysis	H.L. Royden
378.	68459	An Introduction to Measures and Integration	Inder K. Rana
379.	68465	Mathematical Analysis	Apostol
380.	68466	Mathematical Analysis and Application	S. Nandha/G.P. Rajasekar
381.	68468	Measure Theory and Integration	G. Debarra
382.	68957	A First Course in Real Analysis	M.H. Protter and C.B. Morrey
383.	68971	Mathematical Analysis	Jonathan Lewin
384.	69347	Geometric Construction	Geroge E. Martin
385.	95691	Real Analysis	N.L. Carothers
386.	104721	Mathematical Analysis	Sathish Shirali/Vasudeva

387.	104802	Mathematical Analysis	Apostol
388.	110960	The First Course in Mathematical Analysis	D. Somasundaram and B. Chaudary
389.	111073	A Modern Theory of Integration	Robert G. Bartle
390.	126583	Metric Spaces	Q.H. Ansari
391.	54795	Topology and Modern Analysis	Simons
392.	54994	Basic Topology	Amstrong
393.	65212	Operator Theory and Analysis	H. Bart and I. Gohberg
394.	65558	Linear Functional Analysis	Rynne and Youngson
395.	66307	Beginning Functional Analysis	Karen Saxe
396.	66969	Introductory Functional Analysis with Application	Krengszig
397.	68082	Functional Analysis	M. Thamban Nair
398.	68443	Text Book of Functional Analysis	V.K. Krishnan
399.	68456	Foundations of Functional Analysis	S. Ponnusamy
400.	68469	Functional Analysis	Limaye
401.	68972	An Introduction to Algebraic Topology	Joseph J. Rofman
402.	68977	Introductory Functional Analysis	D. Reddy
403.	69350	Robust Control Theory in Hilbert Space	Feintuch
404.	69353	Algebraic Topology: An Introduction	Massey
405.	95670	Basic Topology	Amstrong
406.	99266	Functional Analysis	Frige Riesz Bela SZ.Nagy
407.	104722	A First Course in Functional Analysis	D. Somasundaram
408.	104726	Topology	Jaraes.R Mumres
409.	104787	Functional Analysis	M. Thamban Nair
410.	104800	Topology of Metric Space	S. Kumaresan
411.	108213	Foundation of Topology	B. Wayne Patty
412.	111081	Principles of Functional Analysis	Martin Schechter
413.	119144	Vector Algebra and Solid Analytic Geometry	Kantikumar/Depak Kumar
414.	68441	Vector Analysis	Shandhi Narayanan/R.K. Mittal
415.	64366	An Introduction to Wavelets Through Linear Algebra	Micheal. W. Frazier
416.	65553	An Introduction to Wavelets Through Linear Algebra	Micheal. W. Frazier
417.	68471	Wavelets and Allied Topics	Jain,Krishna,Mhaskar and Prestin Singh
418.	95677	Fourier and Wavelet Analysis	G. Bachman/ Narich/ Beckenstien
419.	95692	Ripples in Mathematics	A. Jensen and A Lacour Harbo
420.	95694	Wavelets A Primer	Christian Blatter

421.	95696	Wavelets Theory Applications Implementation	M.V. Altaisky
422.	95790	Insight into Wavelets from Theory to Practice	K.P. Soman / Ramachandran
423.	99152	Real Analysis with an Introduction to Wavelets and Applications	Hong / Wang / Gardner
424.	101643	Fourier and Wavelet Analysis	G. Bachman/ Narich/ Beckenstien
425.	125911	Waves and Oscillations	N. Subramaiyam
426.	63961	A Course in Number Theory and Cryptography	Neal Koblitz
427.	64306	Algebraic Number Theory	Nevkirch
428.	65084	Number Theory in Function Fields	Rosen
429.	67280	Elementary Number Theory	Davidoff / Sarnak
430.	68419	Introduction to Analytic Number Theory	Tom and M. Apostol
431.	68422	First Step in Number Theory	Shaitesh Shirali
432.	68447	A Primer on Number Sequence	Shaitesh Shirali
433.	68472	Teaching and Assessing Skill in Mathematics	Simpson
434.	104806	Introduction to Analytic Number theory	Tom and M. Apostol
435.	10392	Differential Equations and Calculus of Variation	L. Elsgolts
436.	53352	Solution to Problems in Calculus of one Variables	Vadlamani Shyam /I.A. Maron
437.	66743	Calculus	Michael Comenetz
438.	68435	Integral Calculus	Shanthi Narayan / P.K Mittal
439.	68474	Calculus for Scientists and Engineers	K.D. Joshi
440.	95734	A Course in Calculus and Real Analysis	Ghorpade / Limaye
441.	104783	Calculus of Variations with Applications	A.S. Gupta
442.	106242	Calculus of Variations with Applications	A.S. Gupta
443.	109699	Calculus	Apostol
444.	110959	Calculus with Maple Labs	Krawcew /Rai
445.	124048	Calculus and Analytic Geometry	Thomas
446.	127343	Problems in Calculus of One Variable	I.A. Maron
447.	127345	Differential and Integral Calculus	N. Piskunov
448.	68431	Differential Geometry	D. Somasundaram
449.	106244	Differential Geometry	D. Somasundaram
450.	106719	The mathematics on Financial Derivatives	Paul Wilmott / Sam Howison
451.	106720	The concepts and practice of mathematical finance	Mark S Joshi
452.	106964	Computational and Finance	Levy

453.	99265	Foundation of Cryptography	Oded Goldreich
454.	104725	Applied Cryptography	B. Schneier
455.	106234	Applied Cryptography	B. Schneier
456.	66486	Berkley problems in Mathematics	Desouza
457.	69365	Mathematical Methods for Physicists	Arfken / Weber
458.	97193	SPSS for Windows Step by Step	Geroge Mallery
459.	104884	Mathematical Physics	Joglekar
460.	111252	Introduction to Mathematical Systems Theory	C. Heij / A. Ran / F.Van Schagen
461.	111256	A Physicist Guide to Mathematician	Tam
462.	111474	Pattern Recognition and Image Analysis	Earl Gose Richard
463.	113024	Methods of Mathematical Physics Vol. 2	Courant / Hillbert
464.	127752	Arithmetic	R.S. Agarwal
465.	99911	Quantitative Aptitude	R.S. Agarwal
466.	106293	Topics in Algebra	I.N. Herstein
467.	129259	Topics in Algebra	I.N. Herstein
468.	95781	Higher Algebra	H.Shall and S.R.Knight
469.	101651	Matrix Operations	Richard Grandson
470.	7642	Algebra Vol.1	Manika Vasagam Pillai
471.	104737	Theory of Automata and Formal Language	A.M. Natarajan
472.	111091	A Text Book on Automata Theory	P.K. Srimani
473.	110968	MATLAB	Hanselman
474.	52929	Mastering MATLAB	Duane Hanselman
475.	68429	Discrete Mathematics	Rajendra Akerker and Rupali Akerker
476.	129141	Discrete Mathematics and its Applications	Kenneth H. Roshan
477.	Spec. Copy	Engineering Mathematics Vol. 1	Kandasamy and Co
478.	127309	Higher Engineering Mathematics	B.V. Ramana
479.	122190	Advanced Engineering Mathematics	Erwin Kreyszig
480.	106256	Graph Theory	Narasingsh Deo
481.	122984	Numerical Methods	Kandasamy and Co
482.	54861	Numerical Methods for Scientific Computation	M. K. Jain and S.R.K. Iyengar
483.	45962	ODE and Their Solutions	George M. Murphy
484.	120201	Resource Management Technologies	V. Sundaresan
485.	6088		Kanti Swaroop
486.	110972	Probability and Random Processes	Scott L. Miller and Co
487.	7081	Mathematics Statistics	S.C. Gupta and V.K. Kapoor
488.	66785	Mathematics Statistics	S.C. Gupta and V.K. Kapoor

489.	54834	Business Statistics	S.P. Gupta
490.	63215	Applied Statistics and Probability	George C. Runger
491.	53667	Fundamentals of Applied Statistics	S.C. Gupta and V.K. Gupta
492.	Spec. Copy	Probability Statistics and Queuing Theory	A. Kandasamy and Co
493.	61846	Schaum's Outlines - Statistics	Murray R. Spiegel
494.	56817	Probability and Random Processes	M.B.K. Moorthy
495.	96124	Probability, Statistics and Random Processes	T. Veerarajan
496.	58360	Vector Calculus	Santhi Narayanan
497.	64322	Number Theory for Computing	Song Y. Yan
498.	119149	Ancillary Mathematics Vol. 2	Manicavasagam Pillay and Co
499.	7271	Ancillary Mathematics Vol. 1	Narayanan
500.	7648	Analytical Geometry	T.K. Manicavachagam Pillai
501.	119149	Ancillary Mathematics Vol.2	S. Narayanan
502.	101842	Research Methodology	R. Pannerselvam
503.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and Co
504.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and co
505.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and co
506.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and co
507.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and co
508.	Spec. Copy	Basic Mathematics for Engineering	S. Arumugam and co
509.	Spec. Copy	Brilliant a tutorials ELITE	Set 2
510.	Spec. Copy	Brilliant a tutorials ELITE	Series, Triangle and Functions
511.	Spec. Copy	Brilliant a tutorials ELITE	Trigonometry
512.	Spec. Copy	Brilliant a tutorials ELITE	Point, Straight line, Circle
513.	Spec. Copy	Brilliant a tutorials ELITE	Ellipse, Hyperbola
514.	Spec. Copy	Brilliant a tutorials ELITE	Binomial Theorem, Permutation and Combination
515.	Spec. Copy	Brilliant a tutorials ELITE	Matrix, Determinant
516.	Spec. Copy	Brilliant a tutorials ELITE	Functional Limits
517.	Spec. Copy	Brilliant a tutorials ELITE	Integration
518.	Spec. Copy	Brilliant a tutorials ELITE	Probability
519.	Dept.	Numerical Methods	A. Singaravelu

	Copy		
520.	Dept. Copy	Algebra Vol.1	T.K. Manicavasagam and co
521.	Dept. Copy	Engineering Mathematics IV Sem QP	A. Singaravelu
522.	Dept. Copy	Computer Oriented Statistical Method	Shanti Sophia Bharathi
523.	Spec. Copy	Engineering Mathematics Vol.1	Kandasamy And Co
524.	Spec. Copy	Engineering Mathematics Vol.1	Kandasamy And Co
525.	Dept. Copy	Time Series	Aptitude
526.	Dept. Copy	Engineering Mathematics Vol.1	Kandasamy And Co
527.	Dept. Copy	Operational Research	H. Taha
528.	Spec. Copy	Transforms and Partial Differential Equation	Kandasamy And Co
529.	Dept. Copy	Engineering Mathematics Vol.1	ITL Education
530.	Dept. Copy	Engineering Mathematics Vol.1	K. Vairamanickam And Co
531.	Dept. Copy	Numerical Methods	K. Subramani and A. Shantha
532.	Dept. Copy	Engineering Mathematics Vol.2	ITL Education
533.	Dept. Copy	Statistics and Numerical Methods	K. Subramani and A. Shantha
534.	Dept. Copy	Ancillary Mathematics Vol.1	S. Narayanan, T.K. Manickavachogam and R. Hanumantha Rao
535.	Dept. Copy	Ancillary Mathematics Vol.2	S. Narayanan T.K. Manickavachogam and R. Hanumantha Rao
536.	119151	Probability and Random Processes with Applications to Signal Processing	Henry Stark and John W. Woods
537.	132511	Operational Research	J.K. Sharma
538.	Spec. Copy	Engineering Maths 1st Sem	M.K. Venkatraman
539.	Spec. Copy	Mathematical Analysis	Apostol
540.	Spec. Copy	Engineering Mathematics Vol.2	Kandasamy and Co
541.	Spec. Copy	Discrete Mathematics - Question Bank	Rajesh Prohit
542.	58314	Operations Research	Kanti Swarup
543.	Comp. Copy	Calculus volume - 1	S. Narayanan
544.	Comp. Copy	Calculus volume - III	S. Narayanan

545.	Comp. Copy	Calculus Volume - II	S. Narayanan
546.	Comp. Copy	Numerical Methods - Question Bank	G. Balaji
547.	Comp. Copy	Operations Research	V.K. Kapoor
548.	Comp. Copy	Topogeometry	K.M.A. Kadhar Batcha
549.	Comp. Copy	Mathematical Modelling	
550.	Comp. Copy	A Primer For Engineering Students With Examples	K. Sivakumar et al
551.	Comp. Copy	Mathematics For Computer Science	Albert. R. Meyer
552.	Comp. Copy	UGC CSIR NET/SET	Pawan Sharma and Co
553.	Spec. Copy	Basic Mathematics For Engineering	S. Arumugam
554.	Spec. Copy	Higher Engineering Mathematics	B.S. Grewal
555.	Spec. Copy	Allied Mathematics Vol.1	Prof. P. Durairpandian
556.	Spec. Copy	Allied Mathematics Vol.2	Prof. P. Durairpandian
557.	Dept. Copy	Numerical Methods	Saumyen Guha
558.	Dept. Copy	Computational Methods For Partial Differential Equations	M.K. Jain, S.R.K. Iyengar
559.	Dept. Copy	Numerical Solution Of P.D.E	K.W. Morton, D.F. Mayers
560.	Dept. Copy	Cryptography, Automata And Learning Theory	Gnanaraj Thomas
561.	Dept. Copy	Numerical Methods With Programs In MATLAB	P. Nagarajan, K. Srinivasa Rao
562.	Dept. Copy	Numerical Methods With Programs In MATLAB	P. Nagarajan, K. Srinivasa Rao
563.	Dept. Copy	Discrete Mathematics	M.K. Venkataraman
564.	Dept. Copy	Discrete Mathematics	M.K. Venkataraman
565.	Dept. Copy	Discrete Mathematics	M.K. Venkataraman
566.	Dept. Copy	Discrete Mathematics	M.K. Venkataraman
567.	Dept. Copy	Discrete Mathematics	M.K. Venkataraman
568.	Dept. Copy	Introduction To Graph Theory	R.J. Wilson
569.	Spec. Copy	Advanced Engineering Mathematics	D.G. Zill

DEPARTMENT OF MATHEMATICS
PAPER ALLOTMENT
(ODD SEMESTER - 2019-2020)

S.No.	Name of the faculty	Course	Paper
1	Dr.K.Srinivasa Rao Professor & Head	III ECE-A	Probability & Random Processes
		I M.Sc.,	Ordinary Differential Equations
		I M.Sc.,	Software Lab_I
2	Dr.N.Saradha Assistant Professor (S-III)	I M.Sc.,	Abstract Algebra
		III ECE-B	Probability Theory & Random Processes
		IV CSE –S1	Resource Management Techniques
		M.Phil.,	Research Methodology- Unit-I
3	Dr.R.Malathi Assistant Professor(S-III)	III CSE-A	Automata Theory
		III B.Sc.,	Statics
		II Mech-A	Mathematics-III
		M.Phil.,	Research Methodology- Unit-II
4	Dr. D. Vijayalakshmi Assistant Professor(S-II)	II M.Sc.,	Fluid Dynamics
		I Civil	Mathematics-I
		III CSE-S5	Automata Theory
		M.Phil.,	Research Methodology- Unit-III
5	Dr.E.Geetha Assistant Professor(S-II)	I ECE-D	Mathematics-I
		II CSE-S1	Mathematics-III
		I M.Sc.,	Real Analysis
		M.Phil.,	Research Methodology- Unit-IV
6	Dr. R. Mageswari Assistant Professor(S-II)	II M.Sc.,	Discrete Mathematics
		I B.E., ECE-C	Mathematics-I
		III B.E., CSE	Automata Theory
		M.Phil.,	Research Methodology- Unit-V
7	Dr. P. Nagarajan Assistant Professor(S-II)	I ECE-B	Mathematics-I
		II M.Sc.,	Operations Research
		IV CSE-B	Resource Management Techniques
		M.E	Engg.Maths-Unit-IV
8	Dr. P. Balaji Assistant Professor(S-II)	I B.E-EEE	Mathematics-I
		II EIE & MT	Probability & Statistics
		II CSE-S3	Mathematics-III
		I M.E.,	Unit-I
9	Dr. S. Vijayabarathi Assistant Professor(S-II)	I ECE-A	Mathematics-I
		III CSE-D	Automata Theory
		II CSE-S2	Mathematics-III
10	Dr. K. Pramila Assistant Professor(S-II)	M.Phil.,	Advanced Applied Mathematics
		III CSE-C	Automata Theory
		IV CSE-D	Resource Management Techniques
11	Dr. J. Sengamalaselvi Assistant Professor(S-I)	IV CSE-C	Resource Management Techniques
		III EIE & MT	Probability & Random Processes
		I Mech-A	Mathematics-I

		I M.E	Unit-III
12	Dr. V. K. Radhakrishnan Assistant Professor(S-I)	I CSE-S2	Mathematics-I
		III Civil	Probability and statistics
		II M.Sc.,	Functional Analysis
		I B.Sc.,	Basics of MATLAB
13	Dr. A. Dhanalakshmi Assistant Professor(S-I)	III ECE-C	Probability & Random Processes
		II Mech-B	Mathematics-III
		I CSE-S5	Mathematics-I
		II B.Sc.,	Quantitative aptitude
14	Dr. K. Bharathi Assistant Professor(S-I)	III ECE-B	Probability & Random Processes
		II Civil	Mathematics-III
		I CSE-S4	Mathematics-I
		II M.Sc.,	Software Lab-VI
15	Dr. T. N. Kavitha Assistant Professor(S-I)	II ECE-A	Mathematics-III
		III Mech-C	Probability and Statistics
		I B.Sc.	Analytical Geometry & Trigonometry
		III B.Sc.,	Data Interpretation
16	Dr. A. Gayathri Assistant Professor(S-I)	I CSE-S3	Mathematics-I
		IV Mech	Operations Research
		III EEE	Probability & Random Processes
		II M.Sc.,	Software Lab-V
17	Mr. K. Saravanan Teaching Assistant	III Mech-A	Probability and Statistics
		II CSE-S4	Mathematics-III
		II ECE-D	Mathematics-III
		I M.Sc.,	Awareness course-I
18	Mrs. Amudha. B Teaching Assistant	III Mech-B	Probability & Statistics
		II CSE –S5	Mathematics-III
		II ECE-C	Mathematics-III
		II M.Sc.,	Awareness course-III
19	Ms. A. Shakila Teaching Assistant	I M.Sc., (Phy)	Mathematical Physics
		III B.Sc.,	Abstract Algebra
		II B.Sc,	Differential Equations & its Applications
20	Ms. Revathi Teaching Assistant	II B.Sc.(Chem)	Allied Mathematics-I
		I B.Sc.,(Comp)	Mathematical foundation to computer science
		III IT	Applied Mathematics for Technology – III
		III BCA & III B.Sc., (CS)	Quantitative Aptitude
21	Mr. Balamurugan Teaching Assistant	I B.Sc.,	Calculus
		III B.Sc.,	Sequence & Series
		I B.Sc., (Phy)	Allied Mathematics-I
22	Ms.G.Subasri Teaching Assistant	II EEE	Mathematics-III
		II ECE-B	Mathematics-III
		I CSE-S1	Mathematics-I
		I M.E	Unit-II

23	Ms. T. Indhumathi	III B.Sc.,	Complex Analysis
		III B.Sc., (Phy)	Mathematical Physics
		I B.C.A	Mathematical Foundations to Computer Sci.
24.	Ms. N. Meenakshi	I MCA	Discrete Mathematics
		II B.Sc.,	Numerical Methods
		I B.Sc.,	Allied Statistics-I

Part-Time

S.No	Year and course	Paper title	Staff Name
1.	II BE-Mech	Mathematics III	Dr. K.Bharathi
2.	I BE-EEE	Mathematics I	Dr. T.N.Kavitha
3.	I BE-Mech	Mathematics I	Dr. S.Vijayarathi
4.	II BE-Civil	Mathematics-III	Dr. E.Geetha
5.	I BE-Civil	Mathematics I	Dr. D. Vijayalakshmi

One Credit Courses-

S.No	Course & Year	Subject	Faculty
1	II B.Sc.,	Quantitative aptitude	Dr.A.Dhanalakshmi
2	III B.Sc.,	Data Interpretation	Dr.T.N.Kavitha
3	I M.Sc.,	Awareness course-I	Mr. K.Sarvanan
4	II M.Sc.,	Awareness course-III	Ms. B. Amudha

**PAPER ALLOTMENT
EVEN SEMESTER 2019-2020**

S.No.	Name of the faculty	Course / Strength	Paper
1.	Dr.K.Srinivasa Rao	M.Phil Maths	Probability Theory & Random Process
		I M.Sc Maths	Software Lab – III Numerical computations using MATLAB
2.	Dr.N.Saradha	II M.Sc.,	Applied Graph Theory
		I ECE A	Mathematics – II
3.	Dr.R.Malathi	I CSE S1	Mathematics – II[Probability & Statistics]
		I B.Sc Maths	Vector Calculus and Fourier Series
4.	Dr. D. Vijayalakshmi	I Mech	Mathematics – II[Calculus, Ordinary Differential Equations and Complex Variables]
		II B.Sc.,Maths	P.D.E and Transform Techniques
5.	Dr.E.Geetha	III B.Sc Maths	Real Analysis
		I CSE S2	Mathematics – II[Probability & Statistics]
6.	Dr. R. Mageswari	I M.Sc.,	Linear Algebra
		I ECE B	Mathematics – II
7.	Dr. P. Nagarajan	II CSE S5	Discrete Mathematics
		I Civil	Mathematics – II [BCEF182T10]
8.	Dr. P. Balaji	II CSE S4	Discrete Mathematics
		I CSE S4	Mathematics – II[Probability & Statistics]
9.	Dr. S. Vijayarathi	I ECE C	Mathematics – II
		I B.Sc., Maths	Allied Statistics II
10.	Dr. K. Pramila	III B.Sc., Maths.	Dynamics
		II M.Sc Maths	Elective – II Fuzzy Mathematics
11.	Dr. J. Sengamalaselvi	III B.Sc.,Maths	Discrete Mathematics & Automata Theory
		I ECE D	Mathematics – II
12.	Dr. V. K. Radhakrishnan	I M.Sc Maths	Complex Analysis
		I B.Sc Maths	Lab – Basics of Matlab
		I EEE	Mathematics-II [Linear Algebra, Transform Calculus, NM]
13.	Dr. A. Dhanalakshmi	II ECE A	Mathematics – IV
		II B.Sc Phy	Matlab (2 periods / week)
		I M.Sc., Maths.	Topology
14.	Dr. K. Bharathi	II CSE S1	Discrete Mathematics
		III B. Sc., Maths	Operations Research (Shared by 2)
		III B. Sc., Maths	Linear Algebra
	Dr. T. N. Kavitha	I M.Sc., Maths.	Software Lab – IV Statistics using

15.			Mega Stat
		I B.Sc., Maths	Classical Algebra
		II ECE B	Mathematics – IV
16.	Dr. A. Gayathri	II ECE C	Mathematics – IV
		III B.Sc Maths	Operations Research (Shared by 2)
		I M.Sc., Maths.	Partial Differential equations
17.	Mr. K. Saravanan	I CSE S5	Mathematics–II [Probability & Statistics]
		II B.Sc Maths	Graph Theory
18.	Ms. B.Amudha	III EIE	Operations Research
		I CSE S3	Mathematics–II [Probability & Statistics]
19.	Mrs.A.Shakila	II B.Sc., Chem	Allied Mathematics – II
		I BCA	Computer Associated Numerical Methods
20.	Mrs.G.Subhasri	II CSE S2	Discrete Mathematics
		II Civil & SE	Mathematics - IV [Probability Theory and Statistics]
21.	Ms.P.Revathi	II CSE S3	Discrete Mathematics
		II ECE D	Mathematics – IV
22.	Mr. Balamurugan	I B.Sc CS	Computer Associated Numerical Methods
		II B.Com B	Business Mathematics
23.	Mrs.N.Meenakshi	I MCA	Probability and Statistics
		II B.Com A	Business Mathematics
		II M.Sc Maths	Awareness Course IV Teaching Methodology
24.	Ms.T.Indhumathi	I B.Sc Phy	Allied Mathematics – II
		II M.Sc Phy	Numerical methods and C Programming (1 Unit – 2 periods / week)
		I M.Sc Maths	Awareness Course – 2 Quantitative Aptitude – I

Workshops / Seminars participated

S.No	Name	Date	Workshop/seminar	Title(as per the certificate)	Organizer
1	N.Saradha	December 19-20, 2019	Faculty Development Program	Faculty Development Program on Computational Tools : Megastat and Solver (MS-Excel Add-ins)	Dept. of Mathematics, SCSVMV
2	N.Saradha	September 3-5, 2019	Workshop	Basics of Vedic Mathematics	Dept. of Mathematics, SCSVMV
3	N.Saradha	15 th June, 2020	Webinar	Writing A Research Grant Proposal	Faculty of Engineering & Computing Sciences, TeerthankerMahaveer University
4	N.Saradha	27.5.2020	Webinar	A Glimpse of MATLAB	Department of Physics, KPR Institute of Engineering and Technology
5	N.Saradha	12.6.2020	Webinar	Graph Theory	PG& Research Department of Mathematics, Government Arts College (Grade-1), C.Mutur, Chidambaram
6	N.Saradha	20 th June 2020	Webinar	Theory of Graphs An Emerging Field of Research	PG & Research Department of Mathematics, Thiagarajar College, Madurai.
7	R.Malathi	September 3-5, 2019	Workshop	Basics of Vedic Mathematics	Dept. of Mathematics, SCSVMV
8	D.Vijayalakshmi	16.05.2020	FDP	ONLINE FACULTY DEVELOPMENT PROGRAM ON “FUZZY SETS AND SYSTEMS”	DEPARTMENT OF MATHEMATICS (SHIFT – II) PATRICIAN COLLEGE OF ARTS AND SCIENCE, CHENNAI
9	D.Vijayalakshmi	06.06.2020	Webinar	To Design Manuscripts using LaTeX”	Department of Electronics and Communication Engineering, Hindusthan Institute of Technology, Coimbatore
10	D.Vijayalakshmi	05.06.2020 06.06.2020	FDP	Statistical Application using SPSS	Department of Statistics and Mathematics, Tagore college of Arts and Science, chrompet
11	D.Vijayalakshmi	12.06.2020	Webinar	Mathematical Modelling for	Department of Mathematics, Dr.M.G.R –

				Knowledge Visualization	Janaki College of Arts and Science for women
12	D.Vijayalakshmi	17.06.2020.	Webinar	Webinar on Enhancement of Mathematical Education using SAGEMATH	PG and Research Department of Mathematics , Dr. Ambedkar Government Arts College
13	D.Vijayalakshmi	18.06.2020	Webinar	SAGEMATH - GREATEST WAY OF UNDERSTANDING MATH	Department of Mathematics PSNA College of Engineering and Technology
14	D.Vijayalakshmi	19.06.2020	Webinar	Some New Directions in Graph Theory	P.G and Research Department of Mathematics, S.T.Hindu College
15	D.Vijayalakshmi	20.06.20	Webinar	Linear programming problems : An introduction and Overview	department of Mathematics Sri Ramakrishna institute of Technology , Coimbatore
16	D.Vijayalakshmi	26.06.2020	Webinar	Introduction to MatLab	PG & Research Department of Mathematics, Gobi college of Arts and Science, Gobichetipalayam
17	D.Vijayalakshmi	29.06.2020	Webinar	Applications of Statistics	PG & Research Department of Mathematics, Sri Ramakrishna College of Arts and Science, Coimbatore
18	E.Geetha	5.8.2019 – 7.8.2019	workshop	SPSS for the Beginners	Department of English, SCSVMV
19	E.Geetha	3.9.2019 – 5.9.2019	Workshop	Basics of Vedic Mathematics	Department of Mathematics, SCSVMV
20	E.Geetha	11.5.2020 – 15.5.2020	online workshop	Mathematical Sciences for CSIR – NET/ SET/ GATE	Department of Mathematics, Sree Narayana guru college, Coimbatore
21	E.Geetha	19.5.2020 – 23.5.2020	online workshop	Mathematical sciences for CSIR – UGC Net Aspirants	PG and Research Department of Mathematics, St.Mary's College, Thoothukudi
22	E.Geetha	28.5.2020 – 30.5.2020	online workshop	Data Analysis using SPSS	Department of Mathematics, The American College, Madurai
23	E.Geetha	28.05.2020.	webinar	Introduction to LATEX	PG Department of Mathematics, Loganatha Narayanasamy Government college, Ponneri, Tiruvalluvar
24	E.Geetha	26.06.2020	webinar	Numerical methods for Heat	Department of Mathematics, School of

				transfer problems	Science and Humanities, Kongu Engineering College, Perundurai, Erode
25	R.Mageswari	5/8/2019 – 7/8/2019	workshop	SPSS for the Beginners	Department of English, SCSVMV
26	R.Mageswari	3/9/2019 – 5/9/2019	Workshop	Basics of Vedic Mathematics	Department of Mathematics, SCSVMV
27	R.Mageswari	27/04/2020 to 02/05/2020	FDP	LaTeX Faculty Development Programme	Chevalier T. Thomas Elizabeth College for Women, Chennai
28	R.Mageswari	18/05/2020 to 22/05/2020	Webinar Series	Webinar Series on LaTeX	VIT, Chennai
29	R.Mageswari	29/05/2020	FDP	Online Learning Tools Post Covid – 19	Department of EIE, SCSVMV
30	R.Mageswari	31/05/2020	FDP	International Faculty Development Programme on “ Linear Programming through Microsoft Excel and Solver – An Appetizer	Sri Sarada College for Women, Salem
31	R.Mageswari	12/06/2020	Webinar	Mathematical Modeling for Knowledge Visualization	Dr.M.G.R - Janaki College of Arts and Science for women, Chennai.
32	R.Mageswari	18/06/2020	Webinar	Mathematical Modeling in Biological Networks	Sri Malolan College of Arts and Science, Chengalpet
33	R.Mageswari	19/06/2020	Webinar	Effective Virtual Classroom Teaching for Teachers	SAI RAM Engineering College, Chennai
34	R.Mageswari	20/06/2020	National level Webinar	Statistical Inference and its Applications	St.Francis College, Bengaluru
35	R.Mageswari	20/06/2020	National Webinar	Emotional competencies for Crisis Management	Dr.M.G.R - Janaki College of Arts and Science for women, Chennai
36	R.Mageswari	23/06/2020	Webinar	Latest Developments and Applications of Graph Theory	KPR Institute of Engineering and Technology, Coimbatore
37	R.Mageswari	27/06/2020	Online National Webinar	Graph Decomposition using Graph Labelings	St.Joseph’s Institute of Technology, Chennai
38	P.Nagarajan	03.09.19 04.09.19 05.09.19	Workshop	Workshop on Basics of Vedic Mathematics	Department of Mathematics, SCSVMV

39	P.Nagarajan	30.01.2020 31.01.2020 01.02.2020 02.02.2020 03.02.2020	Workshop	International work shop on Mathematics Meets the World: Recent Trends and Development (RTDM2020)	School of Advanced Science , Department of Mathematics,. VIT, Vellore, Tamil Nadu
40	P.Nagarajan	19.12.2019 20.12.2019	FDP	Faculty Development Program on Computational Tools: Megastat and Solver (MS - Excel Add- ins)	Organized by Department of Mathematics, SCSVMV
41	P.Balaji	10/02/2020	Workshop	Workshop on Intellectual property rights	Entrepreneurship And Incubation cell SCSVMV
42	P.Balaji	19/12/2019 20/12/2019	FDP	FDP on computational tools,Megastat and Solver	Department of Mathematics, SCSVMV
43	P.Balaji	20/06/2020	FDP	The art of writing and Publishing in SCOPUS journals	JVM degree College, MH
44	P.Balaji	18/06/2020 to 20/06/2020	FDP	Digital education tools for Teachers	Department of Mathematics, University of Madras
45	K.Pramila	3-5 September 2019.	Workshop	Workshop on Basics of Vedic Mathematics	Dept. of Mathematics, SCSVMV
46	K.Pramila	3rd, May, 2020	Webinar	How Nanoscience and Technology Inspired from Nature and Transforming the World?	PG Department of Physics, Cauvery College for Women (Autonomous), Trichy
47	K.Pramila	5-8May 2020.	Webinar	Webinar Series on Conceptual and Applied Physics	Department of Physics, School of Science RK University and Department of Nanoscience& Advanced Materials, SaurashtraUniversity, Rajkot
48	K.Pramila	8 th of May2020	Webinar	Crystallography and its Applications	Department of Science & Humanities, Er. PerumalManimekalai college of Engineering,

					Hosur
49	K.Pramila	18/05/2020 to 22/05/2020	Webinar	Webinar Series on LaTeX	School of Advanced Sciences, Vellore Institute of Technology, Chennai.
50	K.Pramila	29 th of May 2020	Webinar	Fuzzy Logic and its Applications	Department of Science & Humanities TRP Engineering College, Trichy
51	K.Pramila	20th June 2020	Webinar	Fuzzy Graph Theory And Its Applications ” held on organized by the	Department of Mathematics, St Thomas College of Arts And Science, Koyambedu, Chennai in Association with IQAC
52	J.Sengamalaselvi	26-08-19 to 30-08-19	short term course	Electric Vehicle Technology through ICT	Electronics and Instrument engineering Department, SCSVMV
53	J.Sengamalaselvi	19-12-19 to 20-12-19	FDP	Faculty Development Program on Computational Tools : Magastat and Solver (MS-Excel Add-ins)	Dept. of Mathematics, SCSVMV
54	J.Sengamalaselvi	10-02-2020 to 14-02-2020	short term course	Open Source Technologies through ICT	Computer science engineering Department, SCSVMV
55	J.Sengamalaselvi	24-02-2020 to 28-02-2020	short term course	Research Oriented Project Work through ICT	Electronics and Instrument engineering Department, SCSVMV
56	J.Sengamalaselvi	23-03-2020 to 27-03-2020	short term course	Artificial Intelligence through ICT	Electronics and Instrument engineering Department, SCSVMV
57	J.Sengamalaselvi	23 -04-2020.	Webinar	Linear regression using Python webinar	codegnan IT solutions OPC PVT LTD
58	J.Sengamalaselvi	12.06.2020.	WEBINAR	Covid-19 Economic opportunities and challenges	Department of Economics, D.K.M. COLLEGE FOR WOMEN,
59	J.Sengamalaselvi	15.06.2020.	webinar	Spanning Trees and Colourings	Department of Mathematics in association with Internal Quality Assurance Cell, The QuaideMilleth College for Men, Chennai,
60	J.Sengamalaselvi	5-6- 2020	Webinar	Preparing Ourselves To Meet Post Covid Academic Challenges	VIT University TN
61	J.Sengamalaselvi	15-6-2020 to 16-6-	Webinar	Analysis of Mathematical	Department of Mathematics, Institute of

		2020		Sciences and it's Applications”	Science and Laboratory Education, IPS Academy, Indore
62	J.Sengamalaselvi	25-6-2020	Webinar	Stress Management Through Inner Healing	School of Management studies, Sathyabama Institute of Science and Technology
63	A.Dhanalakshmi	26/08/2019 to 30/08/2019 (One Week)	Short term course	AICTE recognized Short term course on Electric Vehicle Technology	Electrical Engineering Department at SCSVMV
64	A.Dhanalakshmi	10-02-2020 to 14-02-2020	short term course	Open Source Technologies through ICT	Computer science engineering Department, SCSVMV
65	A.Dhanalakshmi	24-02-2020 to 28-02-2020	short term course	Research Oriented Project Work through ICT	Electronics and Instrument engineering Department, SCSVMV
66	A.Dhanalakshmi	13.05.2020	Webinar	Importance of Mathematics in Artificial Intelligence & Machine Learning and Imaging	Department of Mathematics with Computer Applications, PSG College of Arts & Science
67	A.Dhanalakshmi	04.06.2020	Webinar	Applications of Differential Equations	Kongunadu Arts & Science College, Coimbatore
68	A.Dhanalakshmi	05.06.2020	Webinar	One Day International Webinar on “Science and Engineering for Nature Conservation”	J.C.Bose University of Science and Technology YMCA, Faridabad .
69	A.Dhanalakshmi	08.06.2020 to 13.06.2020	Faculty development program	E-Content development for teaching learning	Arihant College of Arts Commerce Science,Pune.
70	A.Dhanalakshmi	17.06.2020 to 18.06.2020	Webinar	CSIR Problems Solving Techniques in Algebra and Analysis	Department of Mathematics (Shift-II), St. Joseph’s College, Tiruchirappalli
71	T.N.Kavitha	18 th June 2020.	webinar	Mathematical modeling in biological network	Sri Malolan college of arts and science
72	T.N.Kavitha	25 th April to 3 rd May 2020	webinar	“Unlock Your Carrer And Unleash Your Potenetial”	Nilgiri college of arts and science
73	T.N.Kavitha	3 rd may 2020	webinar	Build your career in data science	Codeguhn IT Solution OPC Pvt. Ltd

74	T.N.Kavitha	9 th may 2020	webinar	Building Decision Tree from scratch using python	Codeguhn IT Solution OPC Pvt. Ltd
75	T.N.Kavitha	9 th May2020	webinar	3D printing application in fighting with covid- 19	Sai Ram institute of technology
76	T.N.Kavitha	15 th may2020	webinar	How To Write Research Paper	Erode sengunthar engineering college
77	T.N.Kavitha	16 th may 2020	webinar	Building supports vector machine learning model	Codeguhn IT Solution OPC Pvt. Ltd
78	T.N.Kavitha	22 nd may 2020	webinar	Fuzzy Set Theory and its applications	Little flower degree college
79	T.N.Kavitha	18-06-2020	webinar	“Mathematical Modeling In Biological Networks”	Department Of Mathematics With Computer Applications, Sri Malolan College Of Arts And Science
80	T.N.Kavitha	22 nd June 2020	webinar	Toolsand strategies of ICT for interactive pedagogy	JMJ college for women
81	T.N.Kavitha	23 rd June 2020	webinar	Fluid dynamics	Manipal university
82	T.N.Kavitha	19, 20 December 2019	FDP	Computational tools: Megastat and solver(MS-Excel Add- ins)	Department of Mathematics, SCSVMV
83	T.N.Kavitha	11 th to 16 th May 2020	FDP	Faculty developement programme in ICT Tools	Sri Vidyanikethan Engineering College
84	T.N.Kavitha	12 th to 16 th May 2020	FDP	Faculty developement programme in Education For Sustainable Development	Sathyabama Institute Of Science And Technology
85	T.N.Kavitha	21 May 2020	FDP	Faculty developement programme in Optimization Of Time	SIVET College
86	T.N.Kavitha	22 May 2020	FDP	Faculty developement programme in Importance Of Pysiotherapy, in Community	SIVET College
87	T.N.Kavitha	31 May 2020	FDP	Faculty developement	Sri Saradha College For Women

				programme in Linear Programming Through Microsoft Excel And Soler-An Appetizer	
88	T.N.Kavitha	15 th to 19 th June 2020	FDP	Faculty developement programme in Matlab Application -In Mathematics	QIS College of Engineering And Technology
89	T.N.Kavitha	15- 19 June, 2020	FDP	5- Days FDP on “Matlab Applications in Mathematics”	Department of Mathematics-BS&H
90	T.N.Kavitha	21.10.2019 to 25.10.2019	STC	AICTE recognized short term course on Artificial intelligence & optimization through ICT	Electrical Engineering Department, SCSVMV
91	T.N.Kavitha	26.08.2019 to 30.08.2019	STC	AICTE recognised Short Term Course on Electric Vehile Technology	Electrical Engineering Department, SCSVMV
92	T.N.Kavitha	04.05.2020	STC	online course in Scilab, Latex by spoken tutorial	DKM College for Women
93	T.N.Kavitha	5-5-2020	STC	Online Course on ‘Excel - Beginner’	Sri Krishna College Of Technology, Coimbatore
94	T.N.Kavitha	18-05-2020 To 20-05-2020	STC	Three Days National Level Online Course on “Operations Research”	Virudhunagar Hindu Nadar SenthilKumara Nadar College, Virudhunagar
95	T.N.Kavitha	18-05-2020 To 20-05-2020	STC	Three Days online short term training programme on “Latex for Everyone”	Department of engineering sciences, Ramrao adik institute of technology, Nerul, Navi, Mumbai
96	T.N.Kavitha	27 -06-2020.	STC	online course in laplace transform	Kings engineering college
97	T.N.Kavitha	10 to 14 August 2020	STC	Five Days online short term training programme on “Modern	Department of science and Humanities (Mathematics), Kumaraguru college of technology, Coimbatore

				Mathematical Tools in Calculus and Analysis”	
98	T.N.Kavitha	21-26 september 2020	STC	one week online short term training programme on “Mathematica- A Scientific Research Tool”	Department of applied sciences, Sagar institute of research & Technology, Bhopal
99	T.N.Kavitha	4-01-2021	STC	Scilab training	D.K.M. College for Women, with the Spoken Tutorial Project, IIT Bombay
100	K.Bharathi	26-08-19 to 30-08-19	short term course	Electric Vehicle Technology through ICT	Electronics and Instrument engineering Department, SCSVMV
101	K.Bharathi	19-12-19 to 20-12-19	FDP	Faculty Development Program on Computational Tools : Magastat and Solver (MS-Excel Add-ins)	Dept. of Mathematics, SCSVMV
102	K.Bharathi	10-02-2020 to 14-02-2020	short term course	Open Source Technologies through ICT	Computer science engineering Department, SCSVMV
103	K.Bharathi	24-02-2020 to 28-02-2020	short term course	Research Oriented Project Work through ICT	Electronics and Instrument engineering Department, SCSVMV
104	K.Bharathi	23-03-2020 to 27-03-2020	short term course	Artificial Intelligence through ICT	Electronics and Instrument engineering Department, SCSVMV
105	K.Bharathi	30.04.2020	FDP	Be Gentle with Mind and Body	SRM Institute of Science & Technology, Faculty of Science & Humanities, Ramapuram
106	K.Bharathi	14.05.2020	WEBINAR	e-vehicles for sustainable transportation" organized by the Department of Mechanical Engineering	GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY NELLORE
107	K.Bharathi	18-05-2020 to 20-05-2020	FDP	Tools for online classroom post covid - 19	P.B.Siddhartha College of Arts & Science , Vijayawada
108	K.Bharathi	18-05-2020 to 20-05-2020	National level Online Course	Operations Research	Virudhunagar Hindu Nadars Senthikumar Nadar College , Virudhunagar
109	K.Bharathi	29.05.2020	WEBINAR	Online Learning tools post covid - 19	Electronics and Instrumentation engineering Department, SCSVMV

110	K.Bharathi	27-05-2020 to 2-6-2020	National level online course	Operations Research for Industry and Community Development	Department of Mathematics , Besant Theosophical college , Madanapalle
111	A.Gayathri	3 rd &4 th sep 2019	National Workshop	National Workshop on Basics of Vedic Mathematics	SCSVMV
112	A.Gayathri	5th and 6th June 2020	Online FDP	Covid-19 Dataset Analysis using Pandas in Python	Department of CSE and H&S
113	A.Gayathri	01 June to 06 June, 2020	One Week STTP	One Week STTP on Statistical Analysis in SPSS Software	REST Society for Research International (RSRI)
114	A.Gayathri	26 th and 27 th ,May'20	Online FDP	Online FDP on MA8551 Algebra and Number theory	Ramco Institute of Technology, Rajapalayam
115	A.Gayathri	19 th May 2020	Online webinar	Online webinar on Assessment for online learning	Cambridge Assessment English
116	K.Saravanan	19,20/12/2019	FDP	Faculty Development Program on Computational Tools: MEGASTAT and Solver(MS-Excel add-ins)	Dept of Mathematics, SCSVMV, Kanchipuram
117	K.Saravanan	27-28/05/2020	FDP	Online FDP on Recent trends in Computational Mathematics	Mohamed Sathak A.J. College of Engineering, Chennai.
118	B.Amudha	19,20/12/2019	FDP	Faculty Development Program on Computational Tools: MEGASTAT and Solver(MS-Excel add-ins)	Dept of Mathematics, SCSVMV, Kanchipuram
119	A.Shakila	Sep 3 to 5 – 2019	Workshop	Workshop on basics of Vedic Mathematics	SCSVMV
120	A.Shakila	Dec 19&20 - 2019	Workshop	Megastat and Solver (MS-Excel Addins)	SCSVMV
121	A.Shakila	Jun 1 to 6 - 2020	Workshop	Statistical analysis in SPSS	Rest Society for research International (REST)–

				software (online mode)	Krishnagiri
122	A.Shakila	Jun 22 – 2020	Seminar	Recent trends in mathematics	MVN JS & RVR College of arts & Science
123	A.Shakila	May 25 - 2020	Seminar	Mathematical modeling of the Covid 19 Spread	Sri Shankarlal Sundarbai Shasun Jain College for Women
124	A.Shakila	Apr 27 to 29 2020	Seminar	Mathematics of Industry 4.0	SRM Institute of Science & technology – Ramapuram
125	P.Revathi	19,20/12/2019	FDP	Faculty Development Program on Computational Tools: MEGASTAT and Solver(MS-Excel add-ins)	Dept of Mathematics, SCSVMV, Kanchipuram
126	G.Subasri	04.03.2020	Workshop	International Workshop on Graph Labelling and Colouring	Mathematics Division, School of Advanced Sciences, VIT, Chennai
127	G.Subasri	19.12.19 20.12.19	FDP	Computational Tools: Megastat and Solver(MS-Excel Add-ins)	Department of Mathematics, SCSVMV
128	N.Meenakshi	3,4,5-September 2019	Workshop	Workshop on Basics of Vedic Mathematics	Department of mathematics, SCSVMV
129	N.Meenakshi	23-May,2020	Webinar	Tough times never last, but tough people do	Sri Venkateswaraa College of Technology
130	N.Meenakshi	6.6.2020	Webinar	“Fuzzy Sets Vs Crips Sets”	Department of Mathematics, Arasu Engineering College
131	N.Meenakshi	8.6.2020	Webinar	“How to grow during Uncertain Times”	P .G .Department of Human Resource Management
132	N.Meenakshi	11,12 th june,2020	Webinar	“Molecular Descriptors in Chemical Graph Theory & Conditional Resolving Parameters Of Graphs”	Department of Mathematics, Government Arts College,Udhamandalam
133	N.Meenakshi	18 th June,2020	Webinar	“Statistical Methods”	Department of Maritime Commerce
132	N.Meenakshi	19 th June,2020	Webinar	Statistics for data analytics	Department of mathematics, KPRIET
133	N.Meenakshi	18-06-2020	Webinar	“Mathematical Modeling In Biological Networks”	Department of Mathematics with computer applications
134	N.Meenakshi	20 June	Webinar	Linear	Department of

		2020		Programming Problems: An Introduction and Application	Mathematics, Sri Ramakrishna Institute Of Technology, Coimbatore
135	N.Meenakshi	16 th June 2020	Webinar	“Applications of Stochastic Process in Real World Problem and Graph Theory in Secured data Transmission”	Department of Mathematics, Sri Akilandeswari Women’s college, Wandiwash
136	N.Meenakshi	19 th June 2020	Webinar	“Some New Directions in Graph theory”	Department of Mathematics, S.T.Hindu college, Nagercoil
137	N.Meenakshi	18 th June, 2020	Webinar	“Sagemath- Greatest way Of Understanding Math”	SCSVMV University
138	N.Meenakshi	23.06.2020	Webinar	“b-Coloring of Corona Graphs”	Department of Science and Humanities
139	N.Meenakshi	26.06.2020	Webinar	“Modern Perspective to Finite Elements Method & its applications	Department of Science and Humanities, SRM TRP Engineering College, Trichy.
140	N.Meenakshi	26.06.2020	Webinar	“introduction to MATLAB”	PG & RESEARCH Department of mathematics
141	N.Meenakshi	24.06.2020	Webinar	“ YOGA: YOUR BEACON OF INNER PEACE”	Department of Physical Education
142	N.Meenakshi	17 th June	Webinar	“Webinar on Enhancement of Mathematical Education using SAGEMATH”	Department of mathematics
143	N.Meenakshi	20 th June, 2020	Webinar	“Statistical Inference and its Applications”	Department of Statistics
144	N.Meenakshi	29.06.2020	Webinar	“Applications of Statistics”	PG & RESEARCH Department
145	N.Meenakshi	19,20 December 2019	FDP	“Faculty Development Program on Computational Tools: Megastat and Solver (MS-Excel Add-ins)	Department of mathematics , SCSVMV
146	N.Meenakshi	30.04.2020 to 04.05.2020	FDP	Faculty development programme included hands on exposure in latex	Department of mathematics, D.K.M. college for women, vellore.

				and scilab	
147	N.Meenakshi	16th may 2020	FDP	Faculty development program on “fuzzy sets and systems”	Department of mathematics (shift – II) patrician college of arts and science, Chennai
148	N.Meenakshi	31.05.2020	FDP	International online faculty development programme on “linear Programming through Excel and Solver- An Appetizer”	Department of mathematics, Sri Saradha College for Women(Autonomous), Salem- 16
149	S.Vijayabharathi	3-5 September 2019.	Workshop	Workshop on Basics of Vedic Mathematics	Dept. of Mathematics, SCSVMV
150	S.Vijayabharathi	19,20 December 2019	FDP	“Faculty Development Program on Computational Tools: Megastat and Solver (MS-Excel Add-ins)	Department of mathematics , SCSVMV

FACULTY PRESENTATION

July 2019- June2020

Dr.N.Sarada

1. Presented a paper entitled Efficient Triple Connected.Com Domination Number of A Graph in the International Conference on Mathematical Computer Engineering ,VIT University, Chennai during 20-21, February 2020
2. Presented a paper entitled Secure Triple Connected Two Domination in the International Conference on Mathematical Computer Engineering ,VIT University, Chennai during during 20-21, February 2020.

Dr.R.Malathi

1. Presented a paper, Laplacian of a diagonal matrix for complete Undirected Graph in the National Conference on Rising Trends in Mathematical Analysis and Computing Technologies (NCRTMACT-2020) organized by Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam-603 306 on 7thFebruary 2020.
2. Presented R. Malathi, Laplacian of a diagonal matrix for complete digraph in the National Conference on Rising Trends in Mathematical Analysis and Computing Technologies (NCRTMACT-2020) organized by Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam-603 306 on 7thFebruary 2020
3. Presented a paper , Three Valued Logic on Complex Logical Variables in the International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020) organized by Science Department, Thiruvalluvar University, Vellore – 632 115, during 26-28 February 2020.
4. Presented R. Malathi, Valid Arguments And Heyting Algebra Using Multi Valued Logic in the International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020) organized by Science Department, Thiruvalluvar University, Vellore – 632 115, during 26-28 February 2020.

Dr.D.Vijayalakshmi

1. Vijayalakshmi.D, Path Kernel of Protein Graphs and Similarity of Proteins presented in National Conference on Advances in Science , Humanities and Technology organised by Department of Science and Humanities, Saveetha School of Engineering , SIMATS, Chennai, on 11.07.2019 & 12.07.2019.
2. Vijayalakshmi.D, Similarity/Dissimilarity Study of Protein Using DA matrix of undirected graph presented in International conference on Relevance of Mathematics in Real life Scenario, organised by Department of Mathematics Vidhya Sagar Women's College, Chengalpattu on 09.09.2019 at Chengalpattu.
3. Vijayalakshmi. D, Distance Adjacency Matrix with Shortest Path and Protein Similarity/Dissimilarity, presented XXVIII CONGRESS OF APTSMS & NATIONAL CONFERENCE ON RECENT TRENDS IN PURE AND APPLIED MATHEMATICS 6 - 8 December , 2019 Organized by Department of Mathematics, RASHTRIYA SANSKRIT VIDYA PEETHA Tirupati - Andhra Pradesh

Dr.E.Geetha

Presented a paper “The Dufour effect of Cu – Water nanofluid flow on free convective heat and mass transfer of an infinite isothermal vertical plate in the presence of radiation and chemical reaction“ in the International conference on Relevance of Mathematics in Real Life Scenario on 9th September 2019, organized by Vidyasagar Women's College at Chengalpattu.

Dr.R.Mageswari

Mageswari.R, Meenakshi.N,” Identifying similar / dissimilar protein structures from contact map of proteins through cosine similarity” presented in the International Conference on Relevance of Mathematics in Real Life Scenario(RMRS), 9th September 2019, organized by the Department of Mathematics and Physics with CA, Vidhya Sagar Women's College, Chengalpattu

Dr.P. Balaji

Balaji P, Ravikumar R, Analysis of MGs with Strongly Independent and Weakly Independent Places Using Sign Incidence Matrix and Their Conversion into Directed graphs, presented in National Conference on Advances in Science , Humanities and Technology organised by Department of Science and Humanities, Saveetha School of Engineering , SIMATS, Chennai, on 11.07.2019 & 12.07.2019.

Dr. J. Sengamalaselvi

1. Presented a paper entitled “Fuzzy Parametrized Fuzzy soft set theory and its applications”, in International Conference on Relevance of Mathematics in Real Life Scenario, Vidhya’s Sagar Women’s College Chengalpattu on 13th September 2019.
2. Presented a paper entitled “Introduction of Fuzzy Matrix”, in National Conference on Raising trends in Mathematical Analysis and computer Technologies, Malon college of Arts and Science ,Madurantagham on 7th February 2020.
3. Presented a paper entitled “Application of Triangular Fuzzy Matrix”, in National Conference on Raising trends in Mathematical Analysis and computer Technologies, Malon college of Arts and Science ,Madurantagham on 7th February 2020.

Dr. V.K. Radhakrishnan

1. Presented a paper Distribution of Bunch of Bananas with the Stem through Monte-Carlo Simulation Technique in the National Conference on Advances in Science, Humanities and Technology organised by School of Engineering, SAVEETHA University, Chennai during July 11 and 12, 2019.
2. Presented a paper Simulation Study on the Queueing Model of Kanchi Kamakshi Temple, in the International Conference on Mathematical Computer Engineering (ICMCE’20) organised by the Department of Mathematics, VIT Chennai Campus on February 21 and 22, 2020.
3. Presented a paper Mathematical Analysis on the Queueing Model of Temples, in the National Conference on Recent Developments in Mechanical Engineering and Modern Techniques (NCRDMEMT 2020) organised by Department of Mechanical Engineering, PTLee Polytechnic College, Chennai

Dr. A. Dhanalakshmi

1. A. Dhanalakshmi, Weighted vertex PI index of Crown and Fan graph, , National Conference in Rising trends in Mathematical analysis and computing technologies organized by the Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam, on 7th February 2020.
2. A. Dhanalakshmi, Kekule Indices of some Benzenoid Structures, National Conference in Rising trends in Mathematical analysis and computing technologies organized by the Department of Mathematics, Computer Science and Applications, Sri Malolan College of Arts and Science, Madurantakam, on 7th February 2020.

Dr.K.Bharathi

1. K.Bharathi.“Optimal Sequence for Travelling Salesman using Graph Structure ”. National Conference On Rising Trends in Mathematical Analysis and Computing Technologies held on 7 Feb, 2020 at Sri Malolan College Of Art and Science, Mocheri Road, Madurantakam – 603306.
2. K.Bharathi. “Critical Path Analyzes in the Model of Project Networks ”. National Conference On Rising Trends in Mathematical Analysis and Computing Technologies held on 7 Feb, 2020 at Sri Malolan College Of Art and Science, Mocheri Road, Madurantakam – 603306.

Dr.T.N.Kavitha

1. T.N.Kavitha, A statistical Comparison of the Hygiene Behaviour for 152 Countries using R, presented in National Conference on Advances in Science , Humanities and Technology organised by Department of Science and Humanities, Saveetha School of Engineering , SIMATS, Chennai, on 11.07.2019 & 12.07.2019.
2. T.N.Kavitha,An Analysis of Variance of the Sanitation Performance of the Universal data, presented in International conference on Relevance of Mathematics in Real life Scenario, organised by Department of Mathematics Vidhyasagar Women’s College, Chengalpattu on 09.09.2019 at Chengalpattu.
3. T.N.Kavitha,An Equivalent Near Idempotent Semigroup, presented in International conference on Relevance of Mathematics in Real life Scenario, organised by Department of Mathematics Vidhyasagar Women’s College, Chengalpattu on 09.09.2019 at Chengalpattu
4. T.N.Kavitha, Bootstrap Hypothesis Test for Test the effect of memory Test training (Using our traditional methods) using R, presented in National Conference on Recent Trends in Pure and applied Mathematics organized by APTSAM, S. V. University, Thirupathi on 6.12.2019 to 8.12.2019.

Dr. A. Gayathri

Presented a paper titled “An Analysis of Weiner Index of Connected Graphs” in International conference on Mathematical Computer Engineering (ICMCE-2020) organized by Department of Mathematics, VIT University, during Feb 21-22, 2020.

Ms. P. Meenakshi

Presented a paper entitled “ Identifying Similar/ Dissimilar protein Structures from contact map of the proteins Through cosine Similarity” in International conference on Relevance of Mathematics in Real Life Scenario (RMRS), 9 th September 2019 ,ISSN-0731-6755.

FACULTY PUBLICATIONS

1. Vijayalakshmi. D, Divya. K, Similarity/Dissimilarity Study of Protein Using DA matrix of undirected graph. A journal of Composition Theory, Volume XII Issue IX, ISSN:0731-6755, 280-285, September 2019.
2. Geetha , M.Nirmala, The Dufour Effect Of Cu – Water Nanofluid Flow On Free Convective Heat And Mass Transfer of an Infinite Isothermal Vertical Plate in The Presence of Radiation and Chemical Reaction, A journal of Composition Theory, Volume XII Issue IX, ISSN:0731-6755, 124- 135, September 2019.
3. Mageswari.R, N.Meenakshi, Identifying Similar / Dissimilar Protein Structures from Contact Map of Proteins Through Cosine Similarity, A journal of Composition theory, XII(IX), 56 – 61, September 2019.
4. J.Sengamalaselvi, T.Indhumathi ,Fuzzy Parametrized Fuzzy Soft Set Theory and its Applications, A journal of Composition Theory, (XII) ,Issue IX (If-5.7),Sep-2019 (UGC Journal)
5. T.N.Kavitha, An Analysis of Variance of the Sanitation Performance of the Universal data, A journal of Composition Theory, Volume XII Issue IX , 268-273, ISSN:0731-6755, September 2019.
6. S..Ramya, T.N.Kavitha, An Equivalent Near Idempotent Semigroup, A journal of Composition Theory, Volume XII Issue IX, 76 -83,, ISSN:0731-6755, September 2019. .
7. K.Srinivasa Rao, Some Selected Topological Indices of Nanostructures of Type King's Graph and First Order Hierarchy Honeycomb, Madhya Bharti Journal of Science, vol.61(2), page:01- 05, November 2019.
8. Kalyanaraman .R and Nagarajan P, "Bulk arrival fixed batch service queue with unreliable server, Bernoulli vacation and with delay time" Recent Trends in Pure and applied Mathematics, AIP Conference proceedings 2177, 020034-1 to 020034-12(2019), 04 December, 2019. Published by AIP Publishing 978-0-7354- 1924-7
9. Vijayavani Pachala, Tabita Dokiarty, Srinivasa Rao Konda, Sheaf Automata of p- Near Rings, Solid State Technology, Vol.63, Issue 1s, pp:351-354, 2020.

10. R.Malathi, T.Venugopal, Valid Arguments and Heyting Algebra Using Multi Valued Logic, International Journal of Management and Humanities (IJMH), ISSN: 2394 – 0913, Volume-4 Issue-5,P.No: 103-108, January 2020 .
11. Vijayalakshmi. D, Divya. K, Distance Adjacency Matrix with Shortest Path and Protein Similarity/Dissimilarity. Journal of Xi'an University of Architecture & Technology, Volume XII, Issue V, ISSN No : 1006-7930, 2474 – 2478, 2020.
12. V K Radhakrishnan, S Fazilath Banu, Distribution of Bunch of Bananas with the Stem through Monte-Carlo Simulation Technique, TE ST Engineering and Management Journal, Vol. 82, , PP: 9176-9185, Jan/Feb 2020.
13. R.Malathi, Finding Eigen Values for Banana Tree, International Journal for Scientific Research & Development, Vol. 7, Issue 12, P.No : 686-689, February 2020.
14. R.Malathi, Three valued logic on Complex Logical Variables, International Journal of Scientific Research in Engineering and Management (IJSREM), Volume 4 Issue 03, P.No 1 to 3, March 2020.
15. R.Malathi, Finding Eigen Values For Butterfly Graphs, International Journal of Scientific Research in Engineering and Management (IJSREM), Volume 4 Issue 03, P.No : 1 to 5, March 2020.
16. K. Bharathi, Optimal Sequence for Travelling Salesman using Graph Structure, International Journal of Scientific Research in Engineering and Management (IJSREM), ISSN: 2582-3930, Volume: 04 Issue: 04 ,1-6, April -2020.
17. T. N. Kavitha, A Statistical Comparison of the Hygiene Behaviors for 152 Countries using R, Test Engineering & Management, Volume 83, Page Number: 16259–16263,(Scopus) , April 2020.
18. T.N.Kavitha , Bootstrap Hypothesis Test For Test The Effect of Memory Test Training (Using Our Traditional Methods) Using R, Journal of Xi'an University of Architecture & Technology(SCOPUS), ISSN No : 1006-7930, May 2020 .
19. Gayathri. A, et al, Removal of acid violet 49 and acid red 88 dyes from aqueous solutions using advanced oxidation process, Materials Today: Proceedings, 24, 1011-1019, 2020.
20. Balaji P, Ravikumar R, Analysis of MGs with Strongly Independent and Weakly Independent Places Using Sign Incidence Matrix and their Conversion into Directed Graphs, TEST Engineering and Management, Volume 83, PP 14440 -14447 May – June 2020

S.No	Name of the Faculty	Role	National/International	Title of the Program	Place	Period
1	Dr. K.Srinivasa Rao	Resource Person	-	MATLAB And Its Programming in Mathematics Association	Department of Mathematics, PC PT MGR Govt. Arts & Science College, Puthur, Sirkali, Tamilnadu.	09-08-2019 and 10-08-2019
2	Dr. K.Srinivasa Rao	Invited Talk	International	International Conference on Mathematical Engineering Applications for Sustainable Development - 2019	University of Malaya, Kuala Lumpur, Malaysia	16-08-2019 to 18-08-2019
3	Dr. K.Srinivasa Rao	Resource Person	National	National Workshop on Numerical Computations Using MATLAB	Department of Mathematics, Little Flower Degree College, Uppal, Hyderabad	06-09-2019 to 07-09-2019
4	Dr. K.Srinivasa Rao	Resource Person	-	Refresher Course in Mathematics	UGC-Human Resource Development Centre (HRDC), Sri Venkateswara University, Tirupati	13-09-2019
5	Dr. K.Srinivasa Rao	Resource Person	-	Refresher Course in Mathematics	UGC-Human Resource Development Centre (HRDC), Sri Venkateswara University, Tirupati	17-09-2019
6	Dr. K.Srinivasa Rao	Resource Person	National	National Workshop on MATLAB in Applied Sciences	Department of Mathematics & Department of Computer Science,	19-09-2019

					MVN JS & RVR College of Arts &Science, Malikipuram, East Godavari District, A.P	
7	Dr. K.Srinivasa Rao	Invited Talk	National	National Seminar on Recent Trends in Mathematics	department of Mathematics (U.G& P.G) , Sri Y.N.College, Narasapur, West Godavari District	21-09- 2019
8	Dr. K.Srinivasa Rao	Endowment Lecture	National	XXVIII Congress of Andhra Pradesh and Telangana States Mathematical Sciences & National Conference on Recent Trends in Pure and Applied Mathematics	Department of Mathematics, Rashtriya Sanskrit Vidyapeetha, Tirupati	06-12- 2019 to 08-12- 2019
9	Dr. K.Srinivasa Rao	Resource person	National	National Workshop on MATLAB in Applied Sciences	Department of Mathematics, Government Arts and Science College, Hosur, Tamilnadu	17-12- 2019 to 18-12- 2019
10	Dr. K.Srinivasa Rao	Resource person	National	A Two Day National Workshop on MATLAB, Megastat, & Solver	Department of Mathematics and Statistics, Avanathi Degree & P.G College, Hyderabad	27-12- 2019 to 28-12- 2019
11	Dr. K.Srinivasa Rao	Resource person	National	Two Days National Workshop on Hands on Computing with MATLAB	Department of Mathematics, School of Engineering, Presidency University, Bengaluru	02-01- 2020 to 03-01- 2020
12	Dr. K.Srinivasa Rao	Resource	-	A Six Day Faculty	Department of	08-01-

		person		Development Program on MATLAB and Its Applications	Mathematics, Swaranandhra Engineering College & Technology (Autonomous), Narasapur	2020 to 13-01-2020
13	Dr. K.Srinivasa Rao	Resource person	-	Value Added Course in MATLAB	Department of Mathematics, Sir C.R. Reddy College, Eluru	24-02-2020 to 26-02-2020
14	Dr. K.Srinivasa Rao	Invited talk	National	National Webinar on Recent Trends in Mathematics	Department of Mathematics, MVN JS & RVR College of Arts and Science	22-06-2020
15	Dr.N.Saradha	- Chair person	National	National Conference on Advances in Science, Humanities and Technology	Savitha School of Engineering, Chennai	11-07-2019 to 12-07-2019
16	Dr.R.Malathi	Resource Persons	-	one day “Workshop on Introduction of Matlab”	Department of Electrical and Electronics Engineering, SCSVMV	21-09-2019
17	Dr.R.Malathi	Chairperson -	International	International Conference on Transdisciplinary & Innovative Research in Science (ictirs 2020)	Science Department, Thiruvalluvar University, Vellore	26-02-2020 to 28-02-2020
18	Dr.D.Vijayalakshmi	Resource person	National	The National Level Workshop on OPEN SOURCES SOFTWARE IN MATH	Department of Mathematics, SOKA IKEDA COLLEGE OF ARTS AND SCIENCE FOR WOMEN	13-09-2019
19	Dr.E.Geetha	Chief guest	-	Mathematics Department	Department of Mathematics,	23-01-2019

				Association	Dr.Puratchi Thalaivar MGR arts and science college, Uthiramerur	
20	Dr.P.Nagarajan	Resource person.	-	workshop on MATLAB and its programming Title of Talk: Plotting 2-D and Solution to ODE using MATLAB	Department of Mathematics, P.S. P.T M.G.R Government Arts and Science College, Sirkalai (Puthur)	10-08- 2019 to 11-08- 2019
21	Dr.P.Nagarajan	Resource person.	-	Application of Mathematics PG and Research	Department of mathematics, Government art college, Chidambaram	30-09- 2019
22	Dr.P.Balaji	Charring Session -	National	National Conerence on Advances in Science, Humanities and Technology	Institute of Science and Humanities, Saveetha School of Engineering,SIMATS, Chennai	12-03- 2020 to 13-03- 2020
23	Dr.J.Sengamalaselvi	Resource person	National	National workshop on Math with open source software	kanchi ShriKrishna Arts and Science College, Kilambi, Kanchipuram	01-02- 2018
24	Dr.J.Sengamalaselvi	Resource person	National	National Level workshop on “ open source softwares in Math	Soka Ikeda college of Arts and Science for Women, Madhanangkupam, Chennai	13-11- 2019
25	Dr.V.K.Radhakrishnan	- Chair person	International	International Conference on Mathematical Computer Engineering 2020	Department of Mathematics, VIT Chennai	21-02- 2020 to 22-02- 2020

26	Dr. A.Dhanalaskhmi	Resource Person	-	Faculty Development Programme on Computational tools : Megastat & Solver (MS-Excel Add-ins)	Department of Mathematics, SCSVMV University, Kanchipuram	19-12-2019 to 20-12-2019
27	Dr. K. Bharathi	Resource Person	National	National level Workshop on Open Source Software in Math	Department of Mathematics, Soka Ikeda College of Art and Science for Women, Sethu Bhaskara Nagar, Madhanangkuppam, Chennai	13-09-2019

Awards Received

1. **Dr N Saradha**, Asst.prof of Mathematics has received Won **Global Teacher Award 2019**. AKS worldwide PVT.LTD , New Delhi on 15th September 2019.
2. **Dr. R Malathi**, Asst.prof of Mathematics has received Won **Global Teacher Award 2019** from AKS worldwide PVT.LTD on 15.09.2019, New Delhi.
3. **Dr. R Malathi**, Asst.prof of Mathematics has received **Best Teacher Award** on 05.09.2019, SCSVMV.
4. **Dr.J.Sengamalaselvi** , Asst.prof of Mathematics has received “**Best Teacher award (2017-2018)**” on the event of Teacher’s day Celebrations , SCSVMV on 05.09.2019.
5. **Dr.J.Sengamalaselvi** , Asst.prof of Mathematics has received “**Best Teacher award (2019-2020)** on the event of Teacher’s day Celebrations , ESN Research group and publications , Chennai on 28.09.2019.
6. **Dr.A.Gayathri**, *Asst.prof of Mathematics has received* “**Best Thesis Award, Indo-Thai Academic Award**”(2019) International level.
7. **Dr.A.Gayathri**, *Asst.prof of Mathematics has received* “**International Woman Researcher Award**”, VDGGOOD Professional Association (2019) International level.

Ph.D. Viva Completed

1. **A.Kanchana** (Mathematics) RM16MA021 completed viva in the topic “Framing, Designing and Minimizing the circuit using Boolean Function in different ways”, with the guidance of **Prof. Dr. K. Srinivasa Rao** on 08.07.2019 at 10.00 am.
2. **G.Vijayalakshmi** (RM16MA31) (Mathematics) completed viva in the topic “Numerical Study of MHD Boundary Layer Flow and Heat and Mass Transfer Problems – A Keller Box Approach”, with the guidance of **Prof. Dr. L. Anand Babu**, on 30.07.2019 & 11.00 am

Student Placement Activities

The following students were selected in Infosys Limited and joined duty at 17th Nov 2020.

G.Devadharshini



B.Haniprasath



D Nirmal Kumar



M Monisha



S Vidyamala



The following students were selected in CTS

M Anusuya



D Divakar



Research Colloquium

(August 2019 to November 2019)

Sl. No.	Date	Staff Name	Designation	Title
1	20/09/19	Dr. A.Gayathri	Assistant Professor(I)	Reaction of second order PDE into its canonical form
2	27/09/19	Dr.J.Sengamalaselvi	Assistant Professor(II)	Properties of Multiplication, Determinants, Rank, Fuzzy soft Matrices
3	04/10/19	Dr. T.N.Kavitha	Assistant Professor(II)	Three types of Matrices Stability
4	11/10/19	Dr. A.Dhanalakshmi	Assistant Professor(I)	Cryptography using Laplace transform of hyperbolic function
5	18/10/19	Dr. K.Bharathi	Assistant Professor(I)	LPP formations of maximal flow problems
6	01/11/19	Dr. K.Srinivasa Rao	Professor & Head	Maximum degree Estrads index
7	08/11/19	Dr. N.Saradhs	Assistant Professor(III)	Secured Triple Connected domination of a Graph
8	15/11/19	Dr. R.Malathy	Assistant Professor(II)	Application of Graph colouring using welch-Powel Algorithm
9	22/11/19	Dr.D.Vijayalakshmi	Assistant Professor(II)	Euclidean Algorithm

Students Conference Presentation Details 2019 – 20

Faculty Name	Student Name	Course	Reg. No.	Event	Level	Details of the Event (Name of the Conference/Seminar/Workshop)	Affiliation (Details of the College/University whom organised the event)	Date
D.Vijayalakshmi	K.Divya	M.Phil.	111825003	Conference	International	International Conference on Relevance of Mathematics in Real life Scenario	Dept.Of Mathematics, Vidyasagar women's college, Chengalpet	09-Sep-19
N.Saradha	E. Krishnap Priya	M.Sc.,	111844013	Conference	International	International Conference on Mathematical Computer Engineering	Dept. of Mathematics, VIT University, Chennai	21-22, February 2020
N.Saradha	S.Mahalakshmi	M.Sc.,	111844015	Conference	International	International Conference on Mathematical Computer Engineering	Dept. of Mathematics, VIT University, Chennai	21-22, February 2020
A.Gayathri	V. Bhuvanapriya	M.Sc.,	111844003	Conference	International	International Conference on Functional Materials	Vellore Institute of Technology, Chennai	February 21 & 22, 2020

Programmes Organised by the Department

- Department of Mathematics organized a Three-Day Workshop on Basic Vedic Mathematics on 3rd - 5th, September 2019. Around 50 participants were participated and got benefitted.



- Department of Mathematics organized a Two-Day Faculty Development Programme on Computational Tools Megastat and Solver (MS-Excel Add-ins) on December 19 and 20, 2019. More than 30 participants were participated and learned the software.



M.Phil Guide Allotment List and Dissertation Topics

Reg.No	Name of the scholar	Name of the guide	Title
111925001	J.Gopinath	Dr. K. Pramila	The Study on Domination no and Bondage no of Stacked Prism Graphs
111925002	P.Roopadevi	Dr. R. MAGESWARI	Studying Protien core of a Protein from the Graph of the Proteins through Perfect Domination
111925003	K.Thillai Rajeswari	Dr. E.Geetha	The Effect of Chemical Reaction of an Unstudy Natural Nanofluid Flow Over a Porous Infinite Vertical Plate with Mhd

M.Sc Guide Allotment List and Dissertation Topics

Reg.No	Name of the scholar	Name of the guide	Title
111844001	V.Aishwarya	Dr.K.Srinivasa Rao	On Minimum degree energy of graph
111844002	J.Aswinijai	Dr. S. Vijayarathi	Problems on Galois theory
111844003	V.Bhuvana priya	Dr. A. Gayathri	An Analysis of Wiener index of some Graphs
111844004	G.Deepika	Dr. K. Bharathi	Study of Maximum Flow Problem and Solution using Open Source Software
111844005	S.Dhakshanamoorthy	Dr. D. Vijayalakshmi	Application of Laplacian Spectrum and Laplacian Matrix In Protein Study: A Survey
111844006	G.Dheepika	Dr. R. Mageswari	Finding Hydrophobic Core of a Protein through Augmented Zagreb
111844007	M.Divyasri	Dr. J. Sengamalaselvi	Fuzzy soft Matrices and its Applications
111844008	V.Indumathi	Dr. T. N. Kavitha	Explore the collected respiratory infection data statistical analysis using R
111844010	L.Kalpana devi	Dr.A.Dhanalakshmi	A study on special properties of Hexagonal chain and ISI index of some graphs
111844011	M.Kandan	Dr.R.Malathi	Laplacian of a Diagonal Matrix for Complete Undirected Graph in Coding
111844012	P.Kanimozhi	Dr. D. Vijayalakshmi	Novel 2D representation and similarity of Protein
111844013	E.Krishnapriya	Dr.N.Saradha	A Study On Two Domination Number Of A Graph
111844014	K.S.Lavanya	Dr.K.Srinivasa Rao	On Maximum Degree Laplacian Energy of Graph

111844015	S.Mahalakshmi	Dr.N.Saradha	A Study On Triple Connected.Com Domination Number Of A Graph
111844016	R.Praveen Kumar	Dr. V. K. Radhakrishnan	Distance and Degree based Topological Study on Full Steiner Tree
111844017	P.Shankar	Dr. P. Balaji	Analysis of Marked Graphs with Strongly Independent and Weakly Independent Places using Sign Incidence Matrix and their Conversion into Digraphs
111844018	M.Soundaryasri srilakshmi	Dr. P. Nagarajan	A study on $m/m^{(k)}/1$ queue with multiple vacations and with second optional service
111844019	P.Vaishnave	Dr.E.Geetha	Analysing the effects of Thermal radiation, Magnetic field and Mass transfer of copper water nanofluid on an infinite vertical plate with variable temperature
111844020	N.Vaishnavi	Dr.R.Malathi	Laplacian of a Diagonal Matrix for Complete Digraph in Coding