KLE Society's

S. NIJALINGAPPA COLLEGE

II-Block, Rajajinagar, Bengaluru-10

Re-accredited by NAAC at A$^+$ grade in 4th cycle

Department of Mathematics

SEMESTER - I

Study Material

We the faculty of mathematics department prepared the class notes to ease the student's learning process. This is an effective and collective attempt to summaries university prescribed syllabus. It will surely helped student community at large. The present study material is supplemented with variety of fully solved examples and illustrations. We hope this study material fulfill the needs of the students of I-semester B.Sc. for the academic year 2025-26 under CBCS scheme. This study material covers the topics Matrices, Differential Calculus, Integral Calculus and Analytical Geometry of three Dimensions.

Editorial Committee:

1. Dr. Chandrashekarappa A. S — MSc., PhD., HOD, Assistant Professor
2. Smt. Poornima Samaje — MSc., BEd., (PhD) Assistant Professor
3. Smt. Buddamma — MSc., BEd., Assistant Professor

Theory	**Semester - I: Algebra-I, Calculus-I & Analytical Geometry (DCMT111)**	
Maximum Marks: **100** (Semester End Exam:**80**Marks & Internal Assessment: **20**Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	Link
I	Matrices	Link
II	Differential Calculus	Link
III	Integral Calculus	Link
IV	Analytical Geometry	Link
	Question Bank	Link
	3-Modal Question Papers	Link
	Sample of Scheme of Valuation 2024-25	Link

HOD Principal

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Department of Mathematics

SEMESTER - III

Study Material

We the faculty of mathematics department prepared the class notes to ease the student's learning process. This is an effective and collective attempt to summaries university prescribed syllabus. It will surely helped student community at large. The present study material is supplemented with variety of fully solved examples and illustrations. We hope this study material fulfill the needs of the students of III-semester B.Sc. for the academic year 2025-26 under CBCS scheme. This study material covers the topics Groups-II, Sequences, Infinite Series and Ordinary differential equation.

Editorial Committee:

1. Dr. Chandrashekarappa A. S — MSc., PhD., HOD, Assistant Professor
2. Smt. Poornima Samaje — MSc., BEd., (PhD) Assistant Professor
3. Smt. Buddamma — MSc., BEd., Assistant Professor

Theory	**Semester – III : Algebra-III, Real Analysis-I and Differential equation-I**	
Maximum Marks: **100** (Semester End Exam:**80**Marks & Internal Assessment: **20**Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	Link
I	Groups-II	Link
II	Sequences	Link
III	Infinite Series	Link
IV	Ordinary differential equation	Link

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Department of Mathematics

SEMESTER – V: Paper 5.1

Study Material

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Editorial Committee:

1. Dr. Chandrashekarappa A. S — MSc., PhD., HOD, Assistant Professor
2. Smt. Poornima Samaje — MSc., BEd., (PhD) Assistant Professor
3. Smt. Buddamma — MSc., BEd., Assistant Professor

Theory	**Semester – V Paper 5.1 : Real Analysis-II and Complex Analysis (DCMT501)**	
Maximum Marks: **100** (Semester End Exam:60Marks & Internal Assessment: 40Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	Link
I	Improper Integrals	Link
II	Complex numbers & Functions of Complex Variables	Link
III	Complex Integration	Link
IV	Complex Transformations	Link
	3-Modal Question Papers	Link

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Department of Mathematics

SEMESTER – V: Paper 5.2

Study Material

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Editorial Committee:

1. Dr. Chandrashekarappa A. S MSc., PhD., HOD, Assistant Professor
2. Smt. Poornima Samaje MSc., BEd., (PhD) Assistant Professor
3. Smt. Buddamma MSc., BEd., Assistant Professor

Theory	**Semester – V: Vector Calculus and Analytical Geometry (DCMT503)**	
Maximum Marks: **100** (Semester End Exam:**60Marks & Internal Assessment: 40Marks**)		
Unit	**Topic**	**Study Material Link**
	Syllabus	Link
I	Geometry of space curves	Link
II	Vector differential calculus	Link
III	Vector Integration	Link
IV	Planes, Straight Lines & Spheres.	Link
	3-Modal Question Papers	Link

HOD Principal