KLE Society's

S. NIJALINGAPPA COLLEGE

II-Block, Rajajinagar, Bengaluru-10

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

Department of Computer Science

SEMESTER - I

Study Material

We, the faculty of the Department of Computer Science, have prepared these class notes to support and enhance the learning process of our students. This study material is a collective and thoughtful effort to summarize the university-prescribed syllabus. We believe this material will greatly benefit the student community. It includes well-structured theory, relevant programs, and illustrative examples aligned with the topics covered. This resource is designed to meet the academic needs of B.Sc. I-Semester students for the academic year 2025–26, under the SEP scheme. The content covers the following key topics: **Introduction to Computers, C Programming, Factorization Methods, and Sorting & Searching Techniques**.

Editorial Committee:

1. Smt. Soumya M K — MCA, HOD, Assistant Professor
2. Ms. Chaithra C N — MSc., B.Ed., Assistant Professor

Theory	**Semester - I: Problem Solving Techniques (DCCS101)**	
Maximum Marks: **100** (Semester End Exam: **80** Marks & Internal Assessment: **20** Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	**Link**
I	Introduction	**Link**
II	C Programming	**Link**
III	Factorizing methods	**Link**
IV	Sorting & Searching Techniques	**Link**
	Question Bank	**Link**
	3-Model Question Papers	**Link**
	Sample of Scheme of Valuation 2024-25	**Link**

HOD Principal

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Department of Computer Science

SEMESTER - V

Study Material

We, the faculty of the Department of Computer Science, have prepared these class notes to support and enhance the learning process of our students. This study material is a collective and thoughtful effort to summarize the university-prescribed syllabus. We believe this material will greatly benefit the student community. It includes well-structured theory, relevant programs, and illustrative examples aligned with the topics covered. This resource is designed to meet the academic needs of B.Sc. I-Semester students for the academic year 2025–26, under the SEP scheme. The content covers the following key topics: **DBMS Introduction, Data modeling using the ER model, Functional Dependency and normalization of RDBMS, Transaction Processing Introduction.**

Editorial Committee:

1. Smt. Soumya M K — MCA, HOD, Assistant Professor
2. Ms. Chaithra C N — MSc., B.Ed., Assistant Professor

Theory	**Semester – V: DBMS (DCCS501)**	
Maximum Marks: **100** (Semester End Exam:**60** Marks & Internal Assessment: **40** Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	**Link**
I	DBMS Introduction	**Link**
II	Data Modeling using ER Relationship	**Link**
III	Functional Dependency and Normalization of RDBMS	**Link**
IV	Transaction processing Introduction	**Link**
	Question Bank	**Link**
	3-Model Question Papers	**Link**
	Sample of Scheme of Valuation 2024-25	**Link**

HOD Principal

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Department of Computer Science

SEMESTER - V

Study Material

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Editorial Committee:

1. Smt. Soumya M K — MCA, HOD, Assistant Professor
2. Ms. Chaithra C N — MSc., B.Ed., Assistant Professor

Theory	**Semester – V: Artificial Intelligence (DCCS502)**	
Maximum Marks: **100** (Semester End Exam:**60** Marks & Internal Assessment: **40** Marks)		
Unit	**Topic**	**Study Material Link**
	Syllabus	**Link**
I	Introduction to AI	**Link**
II	Knowledge-based Agents	**Link**
III	Introduction to Planning	**Link**
IV	Natural Language Processing	**Link**
	Question Bank	**Link**
	3-Model Question Papers	**Link**
	Sample of Scheme of Valuation 2024-25	**Link**

HOD Principal