SUBJECT: DISCRETE MATHEMATICS – DSC201

2nd year – 1st Semester

After going through this course the student got a thorough knowledge on

COURSE OUTCOME:

CO. No.	COURSE OUTCOMES	BTLevel
DSC201.1	Ability to understand and construct precise mathematical proofs.	1
DSC201.2	Ability to use logic and set theory to formulate precise statements.	5
DSC201.3	Ability to analyze and solve counting problems on finite and discrete structures.	4
DSC201.4	Ability to describe and manipulate sequences.	4
DSC201.5	Ability to apply graph theory in solving computing problems.	4

MAPPING:

CO. No	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC201.1	2	3	3	3	1	1	-	2	2	3	2	-	2	3	-
DSC201.2	2	2	3	3	2	1	2	1	2	-	1	3	2	3	2
DSC201.3	2	2	3	3	3	1	1	1	2	2	1	3	1	2	2
DSC201.4	1	3	3	3	3	1	3	-	2	1	2	1	-	1	1
DSC201.5	2	3	2	3	2	1	1	2	2	2	1	2	1	1	3
Average	**1.8**	**2.6**	**2.8**	**3**	**2.2**	**1**	**1.4**	**1.2**	**2**	**1.4**	**1.4**	**1.8**	**1.2**	**2.2**	**1.6**

SUBJECT: DATA STRUCTURES (DSC202)

2nd year – 1st Semester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

CO. No	COURSE OUTCOME	BT LEVEL
DSC202.1	Develop a program using linear data structures such as array and circular	3
DSC202.2	Develop a program for basic operations of Stack and its applications	3
DSC202.3	Construct a program using Non-linear data structures and their applications	3
DSC202.4	Construct a program using linear data structures for Linked Lists	3
DSC202.5	Ability to Implement searching and sorting algorithms	3

MAPPING

CO No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO1 2	PSO1	PSO2	PSO3
DSC202.1	3	2	1	1	-	2	1	2	1	3	-	1	3	2	3
DSC202.2	3	2	1	1	2	-	1	--	1	-	2	1	3	3	3
DSC202.3	3	2	1	1	-	2	-	2	2	3	2	1	3	3	3
DSC202.4	3	2	1	1	2	-	1	1	2	-	-	1	2	3	3
DSC202.5	3	2	1	1	2	3	2	1	-	1	1	1	2	3	3
Average	3	2	1	1	1.2	1.4	1	1.2	1.2	1.4	1	1	2.6	2.8	3

SUBJECT: MATHEMATICAL AND STATISTICAL FOUNDATIONS - DSC203

2nd year – 1st Semester

COURSE OUTCOME:

CO. No.	COURSE OUTCOMES	BTLevel
DSC203.1	Apply the number theory concepts to cryptography domain	4
DSC203.2	Apply the concepts of probability and distributions to some case studies	4
DSC203.3	Correlate the material of one unit to the material in other units	3
DSC203.4	Resolve the potential misconceptions and hazards in each topic of study.	3
DSC203.5	Knownaboutthelogicfamiliesandrealizationoflogicgates.	1

MAPPING:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC203.1	2	2	3	3	1	1	2	1	2	1	1	2	1	2	2
DSC203.2	1	2	3	3	1	1	3	1	2	1	1	1	2	2	3
DSC203.3	2	2	3	3	3	-	2	2	2	-	2	1	2	-	2
DSC203.4	1	1	3	3	1	1	-	3	2	2	1	3	1	2	-
DSC203.5	1	3	2	3	2	1	1	1	2	3	2	1	1	3	1
Average	1.4	2	2.8	3	1.6	0.8	1.6	1.6	2	1.4	1.4	1.6	1.4	1.8	1.6

COURSE: PYTHON PROGRAMMING (DSC204)

2nd year – 1st Semester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

CO. No.	Course Outcomes	BT Level
DSC204.1	Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.	2
DSC204.2	Demonstrate proficiency in handling Strings and File Systems.	2
DSC204.3	Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.	4
DSC204.4	Interpret the concepts of Object-Oriented Programming as used in Python.	5
DSC204.5	Implement exemplary applications related to Network programming, Web Services and Databases in Python.	6

MAPPING:

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC204.1	3	2	2	2	1	1	1	1	2	1	2	1	2	2	3
DSC204.2	2	3	2	2	1	1	1	1	2	1	2	1	2	2	3
DSC204.3	3	2	2	2	2	2	1	1	3	1	3	1	2	3	3
DSC204.4	3	2	2	2	2	2	1	1	1	1	3	1	3	3	3
DSC204.5	3	2	1	2	2	2	1	1	1	1	1	1	3	3	3
Average	2.7	2.2	2	2	1.5	1.5	1	1	1.8	1	2.2	1	2.4	2.6	3

Subject: Computer Organization & Architecture (DSC205)
2nd year – 1st Semester

COURSE OUTCOME:

Upon completion of the course the students get an idea of:

S. No.	COURSE OUTCOMES	BT Level
DSC205.1	Understand the basics of instructions sets and their impact on processor design.	5
DSC205.2	Demonstrate an understanding of the design of the functional units of a digital computer system	5
DSC205.3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory	2
DSC205.4	Design a pipeline for consistent execution of instructions with minimum hazards	1
DSC205.5	Recognize and manipulate representations of numbers stored in digital computers	5

MAPPING

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC205.1	3	3	3	1	2	-	2	2	1	2	1	2	3	3	3
DSC205.2	2	2	3	2	2	1	1	3	2	-	1	3	3	2	3
DSC205.3	3	3	3	2	2	-	1	2	2	1	1	3	2	3	3
DSC205.4	2	2	3	1	3	2	-	2	1	-	1	2	2	1	3
DSC205.5	3	3	3	2	1	1	2	-	2	1	1	3	3	3	3
Average	2.6	2.6	3	1.6	2	0.5	1.2	1.8	1.6	0.8	1	2.6	2.6	2.4	3

Course: BUSINESS ECONOMICS AND FINANCIAL ANALYSIS (DSC206)
2nd year – 1st Semester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

Course Code	Course Outcomes	BT Levels
DSC206.1	The students will understand the various Forms of Business and the impact of economic variables on the Business.	2
DSC206.2	Understand the elasticity of the demand of the product, different types, and measurement of elasticity of demand and factors influencing on elasticity of demand and supply	2
DSC206.3	Recognize the Production function, features of Iso-Quants and Iso-Costs, Market Structure, Pricing aspects are learnt.	1
DSC206.4	The Students can study the firm's financial position by analyzing the Financial Statements of a Company.	4
DSC206.5	Evaluate different types of financial ratios knowing liquidity, solvency and profitability position of business.	5

MAPPING:

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC206.1	1	2	2	-	1	2	1	2	2	1	2	2	2	2	2
DSC206.2	1	-	2	2	-	2	1	2	2	1	2	2	1	2	2
DSC206.3	2	1	1	1	1	1	2	1	2	1	3	-	2	2	2
DSC206.4	2	1	1	1	2	1	2	1	2	1	3	-	2	1	2
DSC206.5	2	1	1	1	2	1	2	1	2	1	3	1	-	1	2
Average	1.6	1	1.4	1	1.2	1.4	1.6	1.4	2	1	2	1	1.4	1.6	2

SUBJECT: DATA STRUCTURES LAB(DSC207)

2nd year – 1st Semester

Upon completion of the course the students get an idea of

COURSE OUTCOME:

CO. No	Course Outcome	BT Levels
DSC207.1	Implement linear and non linear data structures using linked list.	1
DSC207.2	Apply various data structures such as stack, queue and tree to solve the Problems	4
DSC207.3	Implement various searching and sorting techniques	1
DSC207.4	Analyze the complexity of the algorithms	3
DSC207.5	Choose appropriate data structures while designing the applications	2

MAPPING

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC207.1	2	2	3	1	1	2	2	2	1	2	3	2	1	2	2
DSC207.2	2	2	3	2	3	3	2	2	2	2	3	2	1	2	2
DSC207.3	3	2	3	1	2	3	3	2	2	2	2	2	2	2	2
DSC207.4	3	2	1	2	1	1	3	2	3	1	1	2	2	2	2
DSC207.5	2	2		1	3	1	1	2	2	1	3	2	2	2	2
Average	**2.4**	**2**	**2**	**1.4**	**2**	**2**	**2.2**	**2**	**3**	**1.6**	**2.4**	**2.0**	**1.6**	**2**	**2.0**

SUBJECT:PYTHON PROGRAMMING LAB- DSC208

After going through this course the student got a thorough knowledge on

COURSE CODE	COURSE OUTCOME	BT Level
DSC208.1	Students will be able to describe the number, math functions,strings,list, tuples and dictionaries in python.	1
DSC208.2	Students will be able to acquire the skills to apply different decision-making statements and functions in python.	3
DSC208.3	Students will be able to interpret object-oriented programming in python.	5
DSC208.4	Students will be able to develop skill to understand and summarize different file handling operations.	6
DSC208.5	Students will be able to demonstrate the ability to design GUI applications in python and evaluate different database operations.	3

MAPPING:

CO No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC208.1	3	2	2	3	3	2	3	2	2	3	2	2	2	3	2
DSC208.2	3	2	3	3	2	3	2	2	3	3	2	2	3	3	3
DSC208.3	3	2	3	2	3	3	3	2	2	3	2	2	2	2	3
DSC208.4	3	2	3	2	2	2	2	2	3	-	-	2	3	3	3
DSC208.5	3	2	3	-	3	3	2	2	2	3	-	2	3	3	3
Average	3	2	2.8	2	2.6	2.6	2.4	2	2.4	2.4	1.2	2	2.6	2.8	2.8

SUBJECT: GENDER SENSITIZATION (DSC209)

2nd year – 1st Semester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

CO. No.	CourseOutcome	BTlevel
DSC209.1	Apply the concepts of probability and distributions tosomecasestudies.	3
DSC209.2	Apply the concepts of continuousprobabilitydistributions.	3
DSC209.3	Assessthesamplingtheoryandmakinginferences.	5
DSC209.4	Correlate the material of one unit to the material inotherunits.	2
DSC209.5	Resolvethepotentialmisconceptionsandhazardsineachtopicof study.	1

MAPPING

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC209.1	3	2	3	-	3	1	-	1	1	-	-	2	2	1	3
DSC209.2	3	2	2	2	-	-	2	-	2	1	-	2	2	2	3
DSC209.3	3	2	3	1	2	2	-	2	-	2	3	-	1	2	3
DSC209.4	3	2	2	-	1	-	1	1	1	2	1	1	2	2	3
DSC209.5	3	2	3	3	1	1	3	1	1	-	3	-	1	1	3
Average	3	2	2	1.2	1.4	0.8	1.2	1	1	1	1.4	1	1.6	1.6	3

Subject: Formal Languages and Automata Theory (DSC210)

2nd year – 2ndSemester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

CO. No.	Course Outcomes	BT Levels
DSC210.1	Able to understand the concept of abstract machines and their power to recognize the languages.	5
DSC210.2	Able to employ finite state machines for modeling and solving computing problems.	4
DSC210.3	Able to design context free grammars for formal languages.	1
DSC210.4	Able to distinguish between decidability and undesirability.	3
DSC210.5	Able to gain proficiency with mathematical tools and formal methods.	4

MAPPING

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC210.1	3	3	2	1	2	2	2	1	1	2	1	3	3	3	3
DSC210.2	-	3	1	2	1	1	2	2	2	-	1	2	3	2	3
DSC210.3	2	2	1	2	2	-	1	1	2	1	1	2	3	2	3
DSC210.4	1	2	2	2	2	2	-	2	1	-	1	2	2	1	3
DSC210.5	2	2	2	2	2	1	2	1	2	1	1	3	2	3	3
Average	1.6	2.4	1.6	1.8	1.8	1.2	1.4	1.4	1.6	0.8	1	2.4	2.6	2.2	3

Subject: SOFTWARE ENGINEERING (DSC211)

2nd year – 2nd Semester

Upon completion of the course the students get an idea of:

COURSE OUTCOME:

Course Code	COURSE OUTCOMES	BT Level
DSC211.1	Outline the framework activities for a given project.	1
DSC211.2	Examine Right process model for a given project.	2
DSC211.3	Analyze various system models for a given Context	3
DSC2114	Understand various testing techniques for a given project.	5
DSC211.5	Identify various risks in project development.	5

MAPPING:

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC211.1	3	3	3	1	2	3	2	2	1	2	1	2	3	3	3
DSC211.2	2	3	3	2	2	1	1	3	2	2	1	3	3	2	3
DSC211.3	2	3	3	2	2	-	1	2	2	1	1	3	2	3	3
DSC2114	2	2	3	3	3	2	-	2	2	-	1	2	2	2	3
DSC211.5	3	3	3	2	2	1	2	-	2	1	1	3	3	3	3
Average	2.8	2.8	3	2	2.2	1.4	1.2	1.8	1.8	0.8	1.2	2.6	2.6	2.6	3

SUBJECT: OPERATING SYSTEM – DSC212

2nd year – 2nd Semester

After going through this course the student gets a thorough knowledge on

CO. No	COURSEOUTCOMES	BT Level
DSC212.1	UnderstandtheconceptsofOS,thebasicprinciplesusedinthedesignof modernoperatingsystemandprocess.	2
DSC212.2	Understand the concepts of threads and mechanisms for synchronization.	2
DSC212.3	Understandtheconceptsrelatedtodeadlockandmemorymanagement.	2
DSC212.4	Understandtheconceptsofvirtualmemorymanagement,filesystem.	2
DSC212.5	Understand the concepts of secondary storage structure, protection andcasestudyofLinuxoperating system.	2

MAPPING:

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC212.1	1	2	-	2	2	1	3	2	2	1	1	2	2	2	3
DSC212.2	2	2	3	1	2	1	3	2	3	1	2	2	3	2	1
DSC212.3	2	1	2	3	2	3	3	2	2	2	1	2	2	2	1
DSC212.4	2	2	2	2	1	2	3	2	3	2	2	2	1	2	2
DSC212.5	1	1	2	2	1	-	-	1	2	2	3	2	1	2	3
Average	**1.6**	**1.6**	**1.8**	**2**	**1.6**	**1.4**	**2.4**	**1.8**	**2.4**	**1.6**	**1.4**	**2**	**1.8**	**2**	2

SUBJECT: DATABASE MANAGEMENT SYSTEM- DSC213

2nd year – 2nd Semester

After going through this course the student got a thorough knowledge on

COURSE OUTCOME:

CO. No.	Course Outcomes	BT Levels
DSC213.1	Understand data models to design a database	2
DSC2132	Illustrate the conceptual design for Large enterprises	2
DSC213.3	Formulate SQL queries and integrity constraints over relations	6
DSC213.4	Apply normalization on database for eliminating redundancy	3
DSC213.5	Understand transaction properties, concurrency control and recovery techniques and Explain various data storage and security mechanisms	2

MAPPING:

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1-	PO11	PO12	PSO1	PSO2	PSO3
DSC213.1	3	2	2	3	3	1	2	1	3	2	3	2	3	3	1
DSC2132	3	2	3	2	2	2		2	1	2	3	2	1	3	1
DSC213.3	3	2	2	1	2	2	3	1	1	2	2	2	1	3	1
DSC213.4	3	2	3	1	3	1	3	2	3	2	1	3	2	2	1
DSC213.5	3	2	2	3	3			1	3	2	3	2	3	2	1
Average	3	2	2.4	2	2.6	1.2	1.6	1.4	2.2	2	2.4	2.2	2	2.6	1

SUBJECT: JAVA PROGRAMMING - (DSC214)

2nd year – 2nd Semester

After going through this course the student gets a thorough knowledge on

COURSE OUTCOME:

CO. No	COURSE OUTCOMES	BT Level
DSC214.1	Able to solve real world problems using OOP techniques	3
DSC214.2	Able to understand the use of abstract classes.	2
DSC214.3	Able to solve problems using java collection framework and I/o classes	3
DSC214.4	Able to develop multithreaded applications with synchronization.	5
DSC214.5	Able to develop applets for web applications, Able to design GUI based applications	5

MAPPING:

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
DSC214.1	3	2	2	2	2	1	1	1	2	2	2	3	1	1	1
DSC214.2	2	3	2	2	2	2	1	2	2	2	1	3	2	2	2
DSC214.3	3	3	2	2	3	2	1	2	2	2	3	3	2	2	2
DSC214.4	3	3	2	2	3	2	1	2	3	2	2	2	2	3	2
DSC214.5	2	3	2	2	2	1	1	1	2	2	2	3	1	1	1
Average	**2.6**	**2.8**	**2**	**2**	**2.4**	**1.6**	**1**	**1.6**	**2.2**	**2**	**2**	**2.8**	**1.6**	**1.8**	**1.6**

SUBJECT: OPERATING SYSTEM LAB – DSC215

2nd year – 2nd Semester

After going through this course the student got a thorough knowledge on

COURSE OUTCOME:

CO. No.	COURSE OUTCOME	BT LEVEL
DSC215.1	Implement thebasiccommandofOSandwillexecutethevarioussystemcalls.	3
DSC215.2	Implement the process synchronizationproblemusingsemaphore.	3
DSC215.3	ImplementCPUschedulingalgorithmforprocess schedulinganddeadlockmanagement techniques.	3
DSC215.4	Implementmemorymanagementtechniques.	3
DSC215.5	Implementfilestorageallocationtechniques.	3

MAPPING:

CO. NO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PS03
DSC215.1	2	3	3	3	2	2	2	2	1	2	2	3	3	2	3
DSC215.2	2	2	2	2	2	2	2	2	2	2	1	3	3	2	3
DSC215.3	2	3	3	3	2	1	1	1	1	2	1	3	3	2	3
DSC215.4	2	1	2	3	2	3	3	2	2	1	2	3	3	2	3
DSC215.5	2	2	2	3	2	3	3	2	1	1	2	3	3	2	3
Average	2	2.2	2.4	2.8	2	2.2	2.2	1.8	1.4	1.6	1.6	3	3	2	3

SUBJECT: DATABANE MANAGEMENT SYSTEMS LAB- DSC216

2nd year – 2nd Semester

After going through this course the student got a thorough knowledge on

COURSE OUTCOME:

Courses	COURSE OUTCOME	BT Levels
DSC216.1	Illustrate the basic DDL commands	2
DSC216.2	Illustrate DCL and DML commands.	2
DSC216.3	Demonstrate SQL queries using SQL operators.	5
DSC216.4	Explain the concept of relational algebra.	1
DSC216.5	Implement various queries using date and group functions and elaborate nested queries. Construct views, cursor and triggers.	5

MAPPING:

CO. No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PS03
DSC216.1	3	2	2	2	1	1	2	3	2	1	2	3	3	2	3
DSC216.2	3	3	3	2	3	2	1	3	2	2	-	2	3	2	3
DSC216.3	3	3	2	1	3	2	2	2	1	2	2	1	2	2	3
DSC216.4	3	3	3	2	3	2	1	2	1	1	2	2	2	2	3
DSC216.5	3	3	3	1	3	1	1	2	-	-	1	1	2	2	3
AVG	3	2.8	2.6	1.6	2.6	1.6	1.4	2.4	1.2	1.2	1.4	1.8	2.4	2	3

SUBJECT:JAVA PROGRAMMING LAB- DSC217

2nd year – 2nd Semester

After going through this course the student got a thorough knowledge on

COURSE OUTCOME:

CO. No.	COURSE OUTCOME	BT Level
DSC217.1	Able to write programs for solving real world problems using java collection frame work.	2
DSC217.2	Able to write programs using abstract classes.	3
DSC217.3	DevelopSimpleJavaProgramsusinginheritanceandException Handling.	3
DSC217.4	DevelopMulti-threadingProgrammingandInterfaces.	6
DSC217.5	DevelopGUIapplicationsusingAppletclasses,Swingcomponentsand Eventhandlingprograms.	6

MAPPING:

CO No.	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
DSC217.1	3	2	2	2	2	2	1	2	1	3	-	3	2	3	2
DSC217.2	3	2	2	2	3	2	3	2	2	3	2	3	3	3	3
DSC217.3	3	3	2	2	2	3	3	2	2	2	2	3	2	3	3
DSC217.4	2	3	3	1	3	2	2	2	3	1	1	3	3	3	3
DSC217.5	2	3	3	2	3	-	-	2	2	2	2	3	3	3	3
Average	2.6	2.6	2.4	1..8	2.6	1.8	1.8	2	2	2.2	1.4	3	2.6	3	2.8