



**SECOND YEAR B.TECH (CSE)**  
**(SESSION: 2019-20 )**

**Data Structures (KCS301/ RCS305)**

<b>Course Outcomes (CO)</b>		<b>Bloom's Knowledge Level (KL)</b>
<b>CO 1</b>	Students are able to understand the need for dynamic memory storage over static memory storage in a computer program and apply it to implement the linked list data structures.	K2, K3
<b>CO 2</b>	Students acquire skills to solve problems in real life using the concept of recursion and implementation of real life concepts of stacks and queues.	K2, K3
<b>CO 3</b>	Students are able to understand and implement the concept of hierarchical data structures in the form of Binary trees.	K2, K3
<b>CO 4</b>	Students are able to analyze the concept of graphs and apply to compute the shortest paths and minimum cost spanning trees.	K3, K4
<b>CO 5</b>	Students are able to apply the knowledge to obtain the relevant information from a data set using selective searching and sorting methods.	K3

**C- 203 Data Structures (KCS301/ RCS305)**

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-203.1</b>	3	3	3	3	2			2	2			2
<b>C-203.2</b>	3	3	3	3	2	2		2	2			2
<b>C-203.3</b>	3	3	3	3	2	2		2	2	3		3
<b>C-203.4</b>	3	3	3	3	2	2			2	3		3
<b>C-203.5</b>	3	3	3	3	2	2		2	2			3
C203	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>		<b>2</b>	<b>2</b>	<b>3</b>		<b>3</b>

CO	PSO1	PSO2
<b>C-203.1</b>	3	3
<b>C-203.2</b>	3	3
<b>C-203.3</b>	3	3
<b>C-203.4</b>	3	3
<b>C-203.5</b>	3	3
<b>C203</b>	<b>3</b>	<b>3</b>

## Computer Organization & Architecture (KCS302)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	The students are able to perform BUS design and architecture required for the understanding the circuit design and register transfer.	K2,K4
<b>CO 2</b>	The students are able to perform arithmetic logic unit design with different operations.	K2,K3
<b>CO 3</b>	The students are able to understand how the instructions are given to the processor, decoded and executed in the control unit.	K2,K4
<b>CO 4</b>	To analyze the hierarchical memory system including cache memories and virtual memory. The students acquire the skills to apply various memory mapping schemes.	K3,K4,K5
<b>CO 5</b>	The student acquires knowledge and understanding of the different ways of communication with I/O devices and standard I/O interfaces.	K1,K2

### C-204 Computer Organization & Architecture (KCS302)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C204.1</b>	3	3	3	2	3	2	3					3
<b>C204.2</b>	3	3	3	3	2	2	2					3
<b>C204.3</b>	3	2	2		2	2	2					3
<b>C204.4</b>	3	3	3	3	3	2	3					3
<b>C204.5</b>	3		2			2	2					3
<b>C204</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>					<b>3</b>

CO	PSO1	PSO2
<b>C204.1</b>	3	2
<b>C204.2</b>	3	2
<b>C204.3</b>	3	2
<b>C204.4</b>	3	2
<b>C204.5</b>	3	2
<b>C204</b>	<b>3</b>	<b>2</b>

## Discrete Structure and Theory of Logic (KCS303/ RCS301)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to recall the set theory and number system concepts and should have acquired skills to solve advanced problems on these topics and demonstrate the same through class assignments	K1, K3
<b>CO 2</b>	Students acquire skills to visualize a unified algebraic system and apply the principles in engineering problems.	K1, K3
<b>CO 3</b>	Students learnt the concepts of ordered sets and identify special elements of the same. Students should have acquired skills to learn Boolean Algebra and apply the concepts of the same to solve engineering problems related to circuit design. The students should be able to demonstrate these skills through class and lab assignments.	K1, K2, K3
<b>CO 4</b>	Students learnt and acquired the skills to apply the concepts of inference theory to prove validity of mathematical or societal arguments. The students should be able to demonstrate these skills through lab and class assignments	K1, K3
<b>CO 5</b>	Students learnt the concepts of graph theory and apply them in complex engineering and social problems.	K1, K3

### C-205 Discrete Structure and Theory of Logic (KCS303/ RCS301)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-205.1</b>	2	3	2	2	3	2				2	2	3
<b>C-205.2</b>	3	3	2	2	3	2				2	2	3
<b>C-205.3</b>	3	3	3	2	3	2				2	2	3
<b>C-205.4</b>	3	3	3	2	3	3				3	2	3
<b>C-205.5</b>	3	3	3	2	3	3				3	2	3
<b>C205</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>				<b>2</b>	<b>2</b>	<b>3</b>

CO	PSO1	PSO2
<b>C-205.1</b>	3	3
<b>C-205.2</b>	3	3
<b>C-205.3</b>	3	3
<b>C-205.4</b>	3	3
<b>C-205.5</b>	3	3
<b>C205</b>	<b>3</b>	<b>3</b>

## Data Structures Using C Lab (KCS351/ RCS355)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to design and apply appropriate data structure using simple algorithms for modeling and solving given computing problems	K3, K6
<b>CO 2</b>	Students are able to understand and implement linked-list based data structures, including singly, doubly, and circular linked-lists	K2, K3
<b>CO 3</b>	Students are able to understand and implement the both array based and linked-list based Stack and queue data structure and its operations.	K2, K3
<b>CO 4</b>	Students are able to understand and implement general tree data structures, including binary tree and binary search trees using linked lists.	K2, K3
<b>CO 5</b>	Students are able to understand, analyze and develop programs to implement various searching and sorting techniques using appropriate data structures.	K2, K4, K6

### C-206 Data Structures Using C Lab (KCS351/ RCS355)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-206.1</b>	3	3	3	3	2			2	2			3
<b>C-206.2</b>	3	3	3	3	2			2	2			3
<b>C-206.3</b>	3	3	3	3	2			2	2			3
<b>C-206.4</b>	3	3	3	3	2			2	2			3
<b>C-206.5</b>	3	3	3	3	2			2	2			3
C206	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>			<b>2</b>	<b>2</b>			<b>3</b>

CO	PSO1	PSO2
<b>C-206.1</b>	3	2
<b>C-206.2</b>	3	2
<b>C-206.3</b>	3	2
<b>C-206.4</b>	3	2
<b>C-206.5</b>	3	2
<b>C206</b>	<b>3</b>	<b>2</b>

## Computer Organization & Architecture Lab (KCS352/ RCS352)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	The students are able to perform BUS design and architecture required for the understanding the circuit design and register transfer.	K2, K4
<b>CO 2</b>	The students are able to perform arithmetic logic unit design with different operations.	K2, K3
<b>CO 3</b>	The students are able to understand how the instructions are given to the processor, decoded and executed in the control unit.	K2, K4
<b>CO 4</b>	To analyze the hierarchical memory system including cache memories and virtual memory. The students acquire the skills to apply various memory mapping schemes.	K3, K4, K5
<b>CO 5</b>	The student acquires knowledge and understanding of the different ways of communication with I/O devices and standard I/O interfaces.	K1, K2

### C-207 Computer Organization Lab (KCS352/ RCS352)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-207.1</b>	3	3	3	3	2	2			3	2	2	3
<b>C-207.2</b>	3	3	3	2	3	2			3		2	3
<b>C-207.3</b>	3	3	3	2	3	2			3	2	3	2
<b>C-207.4</b>	3	3	3	3	2				3	2		2
<b>C-207.5</b>	3	3	3	2	2				2			2
<b>C207</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>

CO	PSO1	PSO2
<b>C-207.1</b>	3	2
<b>C-207.2</b>	3	3
<b>C-207.3</b>	3	3
<b>C-207.4</b>	3	2
<b>C-207.5</b>	2	2
<b>C207</b>	<b>3</b>	<b>3</b>

## Discrete Structures and Logic Lab (KCS353/ RCS351)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to recall, from previous set theoretical knowledge, concepts of basic set operations and should be able to design solutions to simple socio-engineering problems by way of computer programs.	K1, K6
<b>CO 2</b>	Students are able to simulate probability theory concepts in Scilab environment. The students should be able to analyze a socio-engineering problem of probability theory, design algorithm for it and implement it in Scilab.	K3, K4
<b>CO 3</b>	Students are able to design algorithmic solutions to socio-engineering problems of binary relations that would answer complex queries of the user.	K6
<b>CO 4</b>	Students are able to apply the concepts of inference theory to prove validity of mathematical or societal arguments.	K3
<b>CO 5</b>	Students learnt the concepts of graph theory and apply in complex engineering and social problems.	K2, K3

### C-208 Discrete Structure and Logic Lab (KCS353/ RCS351)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C208.1</b>	3	2	2	2	3	3				2	2	3
<b>C208.2</b>	3	3	2	3	3	3				2	2	3
<b>C208.3</b>	3	3	2	2	3	3				2	2	3
<b>C208.4</b>												
<b>C208.5</b>												
<b>C208</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>				<b>2</b>	<b>2</b>	<b>3</b>

CO	PSO1	PSO2
<b>C208.1</b>	3	3
<b>C208.2</b>	3	3
<b>C208.3</b>	3	3
<b>C208.4</b>	3	3
<b>C208.5</b>	3	3
<b>C208</b>	<b>3</b>	<b>3</b>

## Mini Project or Internship Assessment (KCS354)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students acquire 'real' working environment and get acquainted with the organization structure, business operations and administrative functions.	K6
<b>CO 2</b>	Students develop hands-on experience in the student's related field so that they can relate and reinforce what has been taught at the institute.	K1, K2, K3
<b>CO 3</b>	Students acquire knowledge of cooperation and to develop synergetic collaboration between industry and the institute in promoting a knowledgeable society.	K1, K6
<b>CO 4</b>	Students get stage for the future recruitment by the potential employers and get awareness of the social, cultural, global and environmental responsibility as an engineer.	K5, K6
<b>CO 5</b>	Students acquire presentation and demonstration skills to effectively communicate the progress of the work to peers and superiors using audio/video, software tools.	K3

### C-209 Discrete Structure and Logic Lab (KCS354)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C209.1</b>	3	2	2	2	3	3			3	2	2	3
<b>C209.2</b>	3	3	2	3	3	3	3	3	2	2	2	3
<b>C209.3</b>	3	3	2	2	3	3		3	2	2	2	3
<b>C209.4</b>	3	3	3	2		3	3		3	2		3
<b>C209.5</b>	3	2	2		3			3	3		2	
<b>C209</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>

CO	PSO1	PSO2
<b>C209.1</b>	3	3
<b>C209.2</b>	3	3
<b>C209.3</b>	3	3
<b>C209.4</b>	3	3
<b>C209.5</b>	3	3
<b>C209</b>	<b>3</b>	<b>3</b>



## Computer System Security (KNC301)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students acquire knowledge to recognize software bugs that pose cyber security threats and to explain how to fix the bugs to mitigate such threats	K2, K3
<b>CO 2</b>	Students acquire knowledge to define cyber attack scenarios to web browsers and web servers and to explain how to mitigate such threats	K1, K2
<b>CO 3</b>	Students acquire knowledge to discover and explain mobile software bugs posing cyber security threats, explain and recreate exploits, and to explain mitigation techniques.	K2, K6
<b>CO 4</b>	Students acquire knowledge to articulate the urgent need for cyber security in critical computer systems, networks, and world wide web, and to explain various threat scenarios	K2, K4
<b>CO 5</b>	Students acquire knowledge to the well known cyber attack incidents, explain the attack scenarios, and apply mitigation techniques.	K2, K3

### C-210 Computer System Security (KNC301)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-210.1</b>	2	3	2	3	2	3		2				3
<b>C-210.2</b>	2	3	2	2	3			2				3
<b>C-210.3</b>	3	3	2	2	2			2				3
<b>C-210.4</b>	2	2	2	2	3			2				3
<b>C-210.5</b>	2	2	2	2				2				3
<b>C210</b>	2	3	2	2	3	3		2				3

CO	PSO1	PSO2
<b>C-210.1</b>	3	
<b>C-210.2</b>	3	
<b>C-210.3</b>	2	
<b>C-210.4</b>	3	
<b>C-210.5</b>	2	
<b>C210</b>	3	

## Operating Systems (KCS401/RCS401)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to understand the main components of operating system, its principles, techniques and functionalities.	K2
<b>CO 2</b>	Students are able to gain knowledge about the communication and concurrency control among the concurrent processes in operating system and analyze as well as handle various issues in inter process communication.	K1,K4
<b>CO 3</b>	Students are able to understand the concept of process and its management and apply these concepts in process scheduling, process synchronization and deadlock.	K2, K3
<b>CO 4</b>	Students are able to apply the concept of paging, segmentation to perform memory management techniques implemented by the operating system. The students will be able to understand the need and implementation of virtual memory.	K2, K3
<b>CO 5</b>	Students understand the requirement and working of an OS as a resource manager, file system manager and I/O manager. They become familiar with the protection and security mechanisms taken by operating system.	K2

### C-213 Operating System (KCS401/ RCS401)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO1
<b>C-213.1</b>	2	2	2	2	2							2
<b>C-213.2</b>	3	3	3	2	2						2	2
<b>C-213.3</b>	3	3	3	2	2						2	2
<b>C-213.4</b>	3	3	3	3	2						2	2
<b>C-213.5</b>	3	3	3	2	2						2	2
<b>C213</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>						<b>2</b>	<b>2</b>

CO	PSO1	PSO2
<b>C-213.1</b>	3	3
<b>C-213.2</b>	3	3
<b>C-213.3</b>	3	2
<b>C-213.4</b>	2	3
<b>C-213.5</b>	3	2
<b>C213</b>	<b>3</b>	<b>3</b>

## Theory of Automata and Formal Languages (KCS402/ RCS403)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students understand the mechanical computations and acquire skills that are to be demonstrated through lab and class assignments, to analyze and design regular language acceptors used in engineering systems	K2, K3, K4
<b>CO 2</b>	Students analyze and design machines (Mealy and Moore) for mathematical problem solving. Students demonstrate the same through lab and class assignments	K4, K6
<b>CO 3</b>	Students analyze a Context Free Language and design rules to generate the strings and verify the properties of the same. Students demonstrate the same through lab and class assignments	K4, K6
<b>CO 4</b>	Students acquire skills that are to be demonstrated through lab and class assignments, to analyze CF languages and design pushdown automaton to identify the same.	K2, K3
<b>CO 5</b>	Students demonstrate their insight, through lab and class assignments, into analysis of computational problems and design of Turing Machines for the same.	K3, K4

### C-214 Theory of Automata & formal Language (KCS402/ RCS403)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-214.1</b>	3	3	3	2	3					2		3
<b>C-214.2</b>	3	3	3	2	3					2		3
<b>C-214.3</b>	3	3	3	2	3					2		3
<b>C-214.4</b>	3	3	3	2	3					2		3
<b>C-214.5</b>	3	3	3	2	3					2		3
<b>C214</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>					<b>2</b>		<b>3</b>

CO	PSO1	PSO2
<b>C-214.1</b>	3	3
<b>C-214.2</b>	3	3
<b>C-214.3</b>	3	3
<b>C-214.4</b>	3	3
<b>C-214.5</b>	3	3
<b>C214</b>	<b>3</b>	<b>3</b>

### Microprocessor (KCS403/ REC405)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students will be able to apply a basic concept of digital fundamentals to Microprocessor based personal computer system.	K3
<b>CO 2</b>	Students will be able to analyze a detailed s/w & h/w structure of the Microprocessor	K4
<b>CO 3</b>	Students will be able to illustrate how the different peripherals (8085/8086) are interfaced with Microprocessor.	K4
<b>CO 4</b>	Students will be able to analyze the properties of Microprocessors(8085/8086)	K4
<b>CO 5</b>	Students will be able to evaluate the data transfer information through serial & parallel ports.	K5

#### C-215 Microprocessor (KCS403/ REC405)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
<b>C-215.1</b>	2	3										
<b>C-215.2</b>	2	2	3									
<b>C-215.3</b>	2	3										
<b>C-215.4</b>	2	3										
<b>C-215.5</b>	2	2	3									
<b>C-215</b>	<b>2</b>	<b>3</b>	<b>3</b>									

CO	PSO1	PSO2
<b>C-215.1</b>	2	
<b>C-215.2</b>	2	
<b>C-215.3</b>	2	
<b>C-215.4</b>	2	
<b>C-215.5</b>	2	
<b>C-215</b>	<b>2</b>	

## Python Programming (KNC402)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to understand and read and write simple Python programs.	K2
<b>CO 2</b>	Students are able to understand and develop Python programs with conditionals and loops.	K2, K6
<b>CO 3</b>	Students are able to understand and define Python functions and to use Python data structures -- lists, tuples, dictionaries.	K1, K2
<b>CO 4</b>	Students are able to understand and do input/output with files in Python.	K1, K2
<b>CO 5</b>	Students are able to understand and do searching, sorting and merging in Python.	K1, K2

### C216 Python Programming (KNC402)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-216.1</b>	2	3	3		3		3	2	2			3
<b>C-216.2</b>	3	3	3	2	3	2	2	2	3			3
<b>C-216.3</b>	3	3	2	3	3	3	3	2	3			3
<b>C-216.4</b>	3	3	3	3	3	3	2	2	3			3
<b>C-216.5</b>	3	3	3	3	3	3	2	2	3			3
C216	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>			<b>3</b>

CO	PSO1	PSO2
<b>C-216.1</b>	2	2
<b>C-216.2</b>	3	3
<b>C-216.3</b>	3	3
<b>C-216.4</b>	3	3
<b>C-216.5</b>	3	3
C216	<b>3</b>	<b>3</b>

## Operating Systems Lab (KCS451/ RCS451)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are familiarized with the operating system modules by implementing various process scheduling and memory management algorithms.	K3
<b>CO 2</b>	Students simulate various CPU Scheduling Algorithms (FCFS, SJF, RR, Priority, Multilevel queue) and compare their performance.	K2, K4
<b>CO 3</b>	Students simulate banker's algorithms for deadlock avoidance, prevention.	K6
<b>CO 4</b>	Students implement various page replacement algorithms for FIFO, LRU, and optimal page replacement and do a comparative study.	K3
<b>CO 5</b>	Students implement and evaluate different disk scheduling algorithms (FCFS, SSTF, SCAN).	K3, K5

### C217 Operating System Lab (KCS451/ RCS451)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-217.1</b>	3	3	3	3	2	2	3				2	3
<b>C-217.2</b>	3	3	3	2	2	2	3				2	3
<b>C-217.3</b>	3	3	3	3	2	2	3				2	3
<b>C-217.4</b>	3	3	3	3	2	2	3				2	3
<b>C-217.5</b>	3	3	3	2	2	2	3				2	3
<b>C217</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>				<b>2</b>	<b>3</b>

CO	PSO1	PSO2
<b>C-217.1</b>	3	3
<b>C-217.2</b>	3	3
<b>C-217.3</b>	3	2
<b>C-217.4</b>	2	3
<b>C-217.5</b>	3	2
<b>C217</b>	<b>3</b>	<b>3</b>

## Microprocessor Lab (KCS452)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students will be able to understand and 8085 Microprocessor based system.	K2
<b>CO 2</b>	Students will be able to execute the string (ascending/descending) using 8085 Microprocessor kit.	K3
<b>CO 3</b>	Students will be able to implement the conversion of different data types (BCD to binary, Hex to ASCII, and vice versa).	K3
<b>CO 4</b>	Students will be able to apply the use of 8085, 8255, 8253 and 0800 in different applications (square wave/triangular/saw-tooth generation)	K3
<b>CO 5</b>	Students will be able to develop serial communication between two 8085 through RS-232 C port using 8251.	K6

### C-218 Microprocessor Lab (KCS452)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO 12
<b>C-218.1</b>	3	3	2						3	3		
<b>C-218.2</b>	3	2	3						3	3		
<b>C-218.3</b>	3	2	2						2	3		
<b>C-218.4</b>	3	3	3						2	3		
<b>C-218.5</b>	3	3	3						3	3		
<b>C-218</b>	<b>3</b>	<b>3</b>	<b>3</b>						<b>3</b>	<b>2</b>		

CO	PSO1	PSO2
<b>C-218.1</b>	2	
<b>C-218.2</b>	3	
<b>C-218.3</b>	3	
<b>C-218.4</b>	3	
<b>C-218.5</b>	3	
<b>C-218</b>	<b>3</b>	

## Python Language Programming Lab (KCS453/ RCS454)

Course Outcomes (CO)		Bloom's Knowledge Level (KL)
<b>CO 1</b>	Students are able to describe the numbers, math functions, strings, list, tuples and dictionaries in python	K2
<b>CO 2</b>	Students acquire the skills to apply different decision making statements and functions in python	K3
<b>CO 3</b>	Students are able to interpret object oriented programming in python	K2
<b>CO 4</b>	Students develop skill to understand and summarize different file handling operations	K2
<b>CO 5</b>	Students demonstrate the ability to design GUI applications in python and evaluate different database operations	K3, K6

### C219 Python Language Programming Lab(KCS453/ RCS454)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>C-219.1</b>	3	2	2	3	3	2	3				3	3
<b>C-219.2</b>	3	2	3	3	2	3	2				3	3
<b>C-219.3</b>	3	2	3	2	3	3	3				3	2
<b>C-219.4</b>	3	2	3	2	2	2	2				2	3
<b>C-219.5</b>	3	2	3		3	3	2				2	3
<b>C219</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>				<b>3</b>	<b>3</b>

CO	PSO1	PSO2
<b>C-219.1</b>	3	3
<b>C-219.2</b>	3	2
<b>C-219.3</b>	2	3
<b>C-219.4</b>	3	2
<b>C-219.5</b>	3	3
<b>C219</b>	<b>3</b>	<b>3</b>