



In Pursuit of Excellence

## Lab Course File

SESSION-2019-2020

SEM- 3<sup>rd</sup>

### *Faculty Details*

Name of the Faculty: Manoj Kumar Singh

Designation: Assistant Professor

Department: Computer Science & Engineering

### *Course Details*

Name of the Programme: B.Tech.

Batch: 2018-2022

Branch: Computer Science & Engineering

Semester: 3<sup>rd</sup>

Name of Subject: Data Structure using C Lab

Subject Code: KCS351

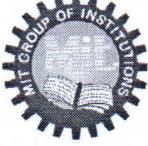
Category of Course: Core Subject

  
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Moradabad-244001

 In Pursuit of Excellence	<h1>Index</h1>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

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 <p>In Pursuit of Excellence</p>	<b>Vision &amp; Mission of Institute</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

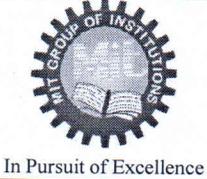
## Vision of Institute

To develop industry ready professionals with values and ethics for global needs.

## Mission of Institute

- To impart education through outcome based pedagogic principles.
- To provide conducive environment for personality development, training and entrepreneurial skills.
- To induct high professional ethics and accountability towards society in students.

  
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	<b>Vision &amp; Mission of Department</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

## **Vision of Department**

To develop globally recognized computer science and engineering graduates with ethical values for need of software industries.

## **Mission of Department**

1. To impart knowledge through well-defined instructional objectives in the field of computer science and engineering.
2. To provide learning ambiance for skills, innovation, leadership and overall personality development.
3. To inculcate professional ethics, teamwork and responsiveness towards society.

  
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 In Pursuit of Excellence	<b>Program Education Objectives</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

## Program Education Objectives

**PEO 1:** The graduates will have entrepreneurial and employable skills in software industries, by adapting themselves in the corporate world by utilizing the defined instructional objectives learnt in the program.

**PEO 2:** The graduates will engage in skill enhancement, that would help to work in their own area of interest, individually or in a team.

**PEO 3:** The graduates will demonstrate ownership and responsiveness towards the profession and the society.

  
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 In Pursuit of Excellence	<b>Program Outcomes</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

## Program Outcomes

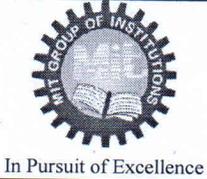
1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities, with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with the society at large, such as, being able to comprehend and

write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

  
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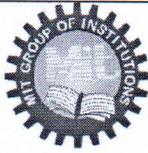
	<b>Program Specific Outcomes</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

After completing their graduation, students of Computer Science and Engineering will be able to do-

**PSO 1:** Comprehend the core subjects of CSE and apply them to resolve domain specific tribulations.

**PSO 2:** Extrapolate the fundamental concepts in engineering and to apply latest technology with programming language skills to develop, test, implement and maintain software products.

  
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## Academic Calendar Center

SESSION-2019-2020

SEM- 3<sup>rd</sup>

### Moradabad Institute of Technology

Ranganga Vihar Phase - II, Moradabad

#### ACADEMIC CALENDAR

Session: 2019 - 2020

S. No.	Particulars	Date	Responsibility
1.	<b>Time Table</b> (a) Display on Notice Boards (b) Distribution to concerned Teachers	29 July 2019 29 July 2019	O.C. Time - Table
2.	Distribution of class lists to teachers	29 July 2019	O.C. Class / DL
3.	<b>Registrations</b> (a) 3 <sup>rd</sup> / 5 <sup>th</sup> / 7 <sup>th</sup> Semester (b) List of unregistered students to various departments (c) Notifying unregistered students for getting registered at the earliest (through class O/Cs / Faculty)	1,2,3 Aug 2019 20 Aug 2019 22 Aug 2019	Concerned Teachers OS Academic Concerned HODs
4.	<b>Commencement of Classes</b> 3 <sup>rd</sup> / 5 <sup>th</sup> / 7 <sup>th</sup> Semester	2,3,4 Aug 2019	Concerned Teachers
5.	Blow up submission to HODs	30 July 2019	Concerned Teachers
6.	Announcement of Test series dates	16 Aug 2019	Dean Academics
7.	(a) Collection of Examination forms from University and announcement of date for availability of forms (b) Last date for submission of forms to office (c) Submission of forms to University	30 Aug 2019**	OS Academic to take timely action as per University directions.
8.	<b>Procurement of stationary &amp; materials for Test Series for full semester</b> (a) Requirement (b) Actual Procurement	31 Aug 2019 5 Sept 2019	Chairman Test Series Committee O.S. Academics
9.	(a) Short attendance compilation and information to parents and undertaking format handed over to students (b) Collection of Short attendance undertaking	09 Sept 2019 11 Sept 2019	O.C. Class
10.	<b>1<sup>st</sup> Test Series</b> Thu, Fri, Sat	11, 13, 14, Sept 2019	
	(a) Announcement of Test Series schedule, Invigilation Programme, Seating arrangements etc.	11 Sept 2019	Class Test Committee
	(b) After completion of Test Series- Evaluation of test copies & showing of copies to students	24 Sept 2019	Concerned Teachers
	(c) Submission of test copies to Nodal Centre	25 Sept 2019	Concerned Teachers
	(d) Report of poor performance of students to class O/Cs	26 Sept 2019	Concerned Teachers
	(e) Short attendance compilation, display on notice board and information to parents.	19 Oct 2019	O.C. Class
11.	<b>2<sup>nd</sup> Test Series</b> Wed, Thurs, Fri	23, 24, 25 Oct 2019	
	(a) Announcement of Test Series schedule, Invigilation Programme, seating arrangement etc.	22 Oct 2019	Class Test Committee

  
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	(b) After completion of Test Series - Evaluation of test copies & showing of copies to students	02 Nov 2019	Concerned Teachers
	(c) Submission of test copies in Nodal Centre	04 Nov 2019	Concerned Teachers
	(d) Report of poor performance of students to class OCs	05 Nov 2019	Concerned Teachers
12.	Filling of student feedback forms for current semester	27 Nov 2019	Concerned HODs
13.	Requirement of additional Faculty (to be conveyed to Director) (for even semester)	30 Nov 2019	Concerned HODs
14.	(a) Floating the electives for even semester	26 Nov 2019	Concerned HODs
	(b) Last date for students choice	30 Nov 2019	
15.	Announcement of dues list and its last date for clearing dues (Current semester)	22 Oct 2019	Accounts/ OS Academic
16.	Date up to which final attendance is to be counted	29 Nov 2019	Concerned teachers
17.	Submission of consolidated list of shortage of attendance to Director and information to Parents.	30 Nov 2019	Class OCs
18.	<b>3<sup>rd</sup> Test Series</b>	<b>Thu, Fri, Sat</b>	<b>28,29,30 Nov 2019</b>
	(a) Announcement of Test Series schedule, Invigilation Programme, Seating arrangement etc.	27 Nov 2019	Class Test Committee
	(b) After completion of Test Series- Evaluation of test copies & showing of copies to students	03 Dec 2019	Concerned Teacher
	(c) Submission of test copies in Nodal Centre	04 Dec 2019	Concerned Teachers
	(d) Report of poor performance of students to class OCs	04 Dec 2019	Concerned Teachers
19.	Submission of seasonal marks:		
	(a) Meeting of Dean Academics, all HODs and Director regarding attendance and performance of students.	04 Dec 2019	Dean Academics
	(b) Checking of Teachers' Records by HODs	05 Dec 2019	Concerned HODs
	(c) Finalization of seasonal marks	05 Dec 2019	Concerned Teachers
	(d) Submission of Award list after final checking and uploading to OS Academics for further necessary action	As per date announced by AKTU	HODs Concerned Teachers
20.	Theory Examinations:		
	(a) Collection of Admit Cards / Roll Nos. from University	As per AKTU schedule	OS Academics to take appropriate actions as per University directions.
	(b) Preparation of Roll lists		
	(c) Collection of stationery such as copies, practical copies, drawing sheets, graph paper etc. from University.		
	(c). Procurement of stationery and other materials locally as necessary.		
21.	Practical Examinations:	As per AKTU schedule	Concerned HODs
	(a) Appointment of Internal Examiners	3 days before the practical exam schedule	Concerned HODs
	(b) Obtaining list of panel of External Examiners from AKTU & preparation of schedule of practical examination.	As per AKTU schedule	OS Academics
	(c) Dispatch of letters/contacting the external examiners	Within 2 days of list obtained from AKTU	HODs and concerned teachers

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22.	Preparation for Even Semester (a) Load Distribution by Department (b) Submission to O.C. Time-Table (c) Display of Time Table on Notice Board	10 Dec 2019 12 Dec 2019 18 Jan 2020	Concerned Coordinators O.C. Time Table
23.	Registration for Even semester [2019 - 20]	To be announced**	OS Academic
24.	Announcement of Academic calendar for Even semester [2019 - 20]	5 Days before the start of Even sem.	Dean Academics

\*\*May be revised as per AKTU Schedule.

*Nitin*  
27.7.2019  
Dean Academics

*Clay*  
Director

Copy to:

1. Chairman	2. Secretary	3. P.A. to Director for Director's folder
4. All HODs	3. DGSW	6. Controller Examination
7. Associate Dean Academics	8. Registrar	9. All Faculty Members through H.O.Ds
10. OS Academics	11. A.S. Examinations	12. Accounts Section
13. T & P Cell	14. Librarian	15. Converter Test Series O.C. Time Table

*Spk*  
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## Academic Calendar Department

SESSION-2019-2020

SEM- 3<sup>rd</sup>

### MORADABAD INSTITUTE OF TECHNOLOGY, MORADABAD

Ram Ganga Vihar Phase-II Moradabad (U.P.)

Approved by AICTE and Affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow

Website: <http://mitmoradabad.edu.in>

Department Academic Calendar, Odd Semester, Session (2019 – 2020)



#### VISION

To develop globally recognized computer science and engineering graduates with ethical values for need of software industries.

#### MISSION

- M1: To impart knowledge through well defined instructional objectives in the field of computer science and engineering.
- M2: To provide a learning ambience for skills, innovation, leadership and overall personality development.
- M3: To inculcate professional ethics, teamwork and responsiveness towards society.

JULY-2019							AUGUST-2019							SEPTEMBER-2019						
Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					
OCTOBER-2019							NOVEMBER-2019							DECEMBER-2019						
Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S	Su	M	T	W	Th	F	S
		1	2	3	4	5						1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

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A	Time Table Display on Notice Boards	O	Expert Lecture on DevSecOps by Mr Kavish Baghel, Thoughts2Binary Gurugram	AC	3 <sup>rd</sup> Test Series
B	Blow Up Submission to HODs	P	Maha Navmi	AD	Submission of consolidated list of shortage of attendance to director and information to parents
C	3 <sup>rd</sup> /5 <sup>th</sup> /7 <sup>th</sup> semester registration	Q	Dussehra	AE	Submission of Test copies in Nodal Center
D	Commencement of Classes of 3 <sup>rd</sup> /5 <sup>th</sup> /7 <sup>th</sup> semester	R	Maharishi Valmiki Jayanti	AF	Submission of Sessional marks
E	Eid Ul Zaha	S	Event 'KuruShetra' by CSSS	AG	Christmas
F	Independence day and Rakshabandhan	T	Short Attendance compilation and information to parents		
G	Event 'Kanha ki Matki' by CSSS	U	2 <sup>nd</sup> Test Series		
H	Krishna Janmashtami	V	Mid Semester Break		
I	Short Attendance compilation and information to parents	W	Submission of Test copies in Nodal Center		
J	Moharram	X	Eid-e-eMilad		
K	1 <sup>st</sup> Test Series	Y	Guru Nanak Birthday		
L	Submission of Test copies in Nodal Center	Z	Event 'Coder 6.0' by CSSS		
M	Event 'ArtShala' by CSSS	AA	Floating the electives for even sem (2019-20)		
N	Gandhi Jayanti	AB	Filling of Student Feedback form for current Semester		

Month	Dates of Teaching Days: (2 <sup>nd</sup> , 3 <sup>rd</sup> & 4 <sup>th</sup> Year)	No. of Teaching Days	No. of Lecture Hour:
Jul-19	-	NA	91* 6=546
Aug-19	3,5,6,7,8,9,10,13,14,16,17,19,20,21,22,24,26,27,28,29,30,31	22	
Sep-19	2,3,4,5,6,7,9,11,16,17,18,19,20,21,23,24,25,26,27,28,30	21	
Oct-19	1,3,4,5,9,10,11,12,14,15,16,17,18,19,21,22,31	17	
Nov-19	1,2,4,5,6,7,8,9,11,13,14,15,16,18,19,20,21,22,23,25,26,27	22	
		82	
	Sessional Examinations	09	
	<b>Total</b>	<b>91</b>	<b>546</b>

  
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## Course Scheme & Exam Scheme

SESSION-2019-2020

SEM- 3<sup>rd</sup>

Lab Name: Data Structure Using C Lab  
Code: KCS351

### B.TECH (COMPUTER SCIENCE AND ENGINEERING)

#### SEMESTER- III

Sl. No.	Subject Codes	Subject	Periods			Evaluation Scheme				End Semester		Total	Credit
			L	T	P	CT	TA	Total	PS	TE	PE		
1	KOE031-38/ KAS302	Engineering Science Course/Maths IV	3	1	0	30	20	50		100		150	4
2	KAS301/ KVE 301	Technical Communication/Universal Human values	2	1	0	30	20	50		100		150	3
			3	0	0								
3	KCS301	Data Structure	3	1	0	30	20	50		100		150	4
4	KCS302	Computer Organization and Architecture	3	1	0	30	20	50		100		150	4
5	KCS303	Discrete Structures & Theory of Logic	3	0	0	30	20	50		100		150	3
6	KCS351	Data Structures Using C Lab	0	0	2				25		25	50	1
7	KCS352	Computer Organization Lab	0	0	2				25		25	50	1
8	KCS353	Discrete Structure & Logic Lab	0	0	2				25		25	50	1
9	KCS354	Mini Project or Internship Assessment*	0	0	2			50				50	1
10	KNC301/ KNC302	Computer System Security/Python Programming	2	0	0	15	10	25		50			0
11		MOOCs (Essential for Hons. Degree)											
		<b>Total</b>										<b>950</b>	<b>22</b>

\*The Mini Project or internship (3-4 weeks) conducted during summer break after II semester and will be assessed during III semester.



In Pursuit of Excellence

**List of Programs as per  
University**

SESSION-2019-2020

SEM- 3<sup>rd</sup>

**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

Write C Programs to illustrate the concept of the following:

1. Sorting Algorithms-Non-Recursive.
2. Sorting Algorithms-Recursive.
3. Searching Algorithm.
4. Implementation of Stack using Array.
5. Implementation of Queue using Array.
6. Implementation of Circular Queue using Array.
7. Implementation of Stack using Linked List.
8. Implementation of Queue using Linked List.
9. Implementation of Circular Queue using Linked List.
10. Implementation of Tree Structures, Binary Tree, Tree Traversal, Binary Search Tree, insertion and Deletion in BST.
11. Graph Implementation, BFS, DFS, Minimum cost spanning tree, shortest path algorithm.

  
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 In Pursuit of Excellence	<b>List of Programs with enhancement by the Faculty Member</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

**Lab Name:** Data Structure Using C Lab

**Code:** KCS351

**Prescribed experiment list by University**

Write C Programs to illustrate the concept of the following:

1. Sorting Algorithms-Non-Recursive.
2. Sorting Algorithms-Recursive.
3. Searching Algorithm.
4. Implementation of Stack using Array.
5. Implementation of Queue using Array.
6. Implementation of Circular Queue using Array.
7. Implementation of Stack using Linked List.
8. Implementation of Queue using Linked List.
9. Implementation of Circular Queue using Linked List.
10. Implementation of Tree Structures, Binary Tree, Tree Traversal, Binary Search Tree, Insertion and Deletion in BST.
11. Graph Implementation, BFS, DFS, Minimum cost spanning tree, shortest path algorithm.

**Practical beyond prescribed list**

1. Implementation of Matrix Multiplication.
2. Implementation of Tower of Hanoi problem using recursion.
3. Implementation of priority queue using Linked List.

  
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 In Pursuit of Excellence	<b>Course Outcomes</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

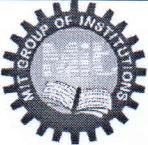
**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

### COURSE OUTCOMES

At the end of course, Students will be able to:

Course Code	CO	Course Outcomes (COs)	Cognitive Levels
<b>KCS351</b>	CO1	KCS351.1 implement matrix and perform operation like insertion, deletion, searching, traversing by using array	Apply
	CO2	KCS351.2 implement various searching techniques	Apply
	CO3	KCS351.3 implement various sorting techniques using recursive and non -recursive method	Apply
	CO4	KCS351.4 implement linear data structure stack , queue, linked list	Apply
	CO5	KCS351.5 implement non-linear data structures tree and graph	Apply

  
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 In Pursuit of Excellence	<h2>CO-PO Mapping</h2>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

### CO-PO Mapping

Course Code	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
<b>KCS351</b>	CO1 KCS351.1	3				2				1	1		
	CO2 KCS351.2	3				2				1	1		
	CO3 KCS351.3	3				2				1	1		
	CO4 KCS351.4	3				2				1	1		
	CO5 KCS351.5	3				2				1	1		
Mapping Strength	KCS351	3				2				1	1		

High: 3    Average: 2    Low: 1

  
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## CO-PSO Mapping

SESSION-2019-2020

SEM- 3<sup>rd</sup>

Lab Name: Data Structure Using c Lab

Code: KCS351

### CO-PSO Mapping

Course Code	CO		PSO1	PSO2
KCS351	CO1	KCS351.1	3	3
	CO2	KCS351.2	3	3
	CO3	KCS351.3	3	3
	CO4	KCS351.4	3	3
	CO5	KCS351.5	3	3
Mapping Strength	KCS351		3	3

  
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**MORADABAD INSTITUTE OF TECHNOLOGY**

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**FACULTY:** MR. MANOJ KR. SINGH (MKS)

**FACULTY TIME TABLE 2019-20 (ODD SEM)**

w.e.f: 02/08/2019 Revised w.e.f: 24/10/2019

DAY	TIME	L T P TOTAL										
		9:00 AM - 10:00 AM	10:00 AM - 11:00 AM	11:00 AM - 12:00 NOON	12:00 AM - 1:00 PM	1:00 PM - 2:00 PM	2:00 PM - 3:00 PM	3:00 PM - 4:00 PM	4:00 PM - 5:00 PM	6	8	20
MONDAY		KCS -301 (L) 3 <sup>RD</sup> C B-323			KCS -301(T) 3 <sup>RD</sup> C3 B-319		KCS -301(T) 3 <sup>RD</sup> B1 B-316		KCS -301(T) 3 <sup>RD</sup> B1 B-113			
TUESDAY			KCS -301 (L) 3 <sup>RD</sup> B B-309			KCS -301(L) 3 <sup>RD</sup> C B-318		KCS-351 3 <sup>RD</sup> A3 B-113				
WEDNESDAY		KCS -301 (T) 3 <sup>RD</sup> B3 B-319	KCS-301 (L) 3 <sup>RD</sup> C B-323			KCS -301 (L) 3 <sup>RD</sup> B B-309						
THURSDAY		KCS-351 3 <sup>RD</sup> C1 B-113				KCS -301 (T) 3 <sup>RD</sup> B2 B-321			KCS-301(T) 3 <sup>RD</sup> C1 B-323			
FRIDAY		KCS-351 3 <sup>RD</sup> B2 B-113										
SATURDAY												

SUB. CODE	SUBJECT NAME
KCS -301	Data Structures
KCS-351	Data Structures Using C Lab

Kanchan- Dept. OC

Mr. Rakesh Kr. Gangwar – OC Time Table

  
**Dr. Somesh Kumar**  
 Prof. & Head, CSE  
 Moradabad Institute of Technology  
 Moradabad-244001

 In Pursuit of Excellence	<b>Schedule of Practical List Performed</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

S. No.	Name of Program	Mapping with Unit	CO Mapping	PO Mapping	PSO Mapping	Batch A3 Completion	Batch B1 Completion	Batch B2 Completion	Batch C1 Completion	Sign
1	WAP to implement Matrix Multiplication.	1	CO1	PO1, PO5, PO9, PO10	PSO1, PSO2	06/08/19	05/08/19	02/08/19	08/08/19	
2	WAP to implement Linear Search.	1,3	CO1, CO2	PO1, PO5, PO9, PO10	PSO1, PSO2	06/08/19	05/08/19	09/08/19	08/08/19	
3	WAP to implement Binary Search.	1,3	CO1, CO2	PO1, PO5, PO9, PO10	PSO1, PSO2	13/08/19	05/08/19	09/08/19	08/08/19	
	WAP to implement Bubble Sort.	1,3	CO1, CO3	PO1, PO5, PO9, PO10	PSO1, PSO2	20/08/19	19/08/19	16/08/19	22/08/19	

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5	WAP to implement Insertion Sort.	1,3	CO1, CO3	PO1, PO5, PO9, PO10	PSO1, PSO2	27/08/19	19/08/19	23/08/19	22/08/19	
6	WAP to implement Selection Sort.	1,3	CO1, CO3	PO1, PO5, PO9, PO10	PSO1, PSO2	27/08/19	26/08/19	23/08/19	29/08/19	
7	WAP to implement Quick Sort (Recursive).	1,3	CO1, CO3	PO1, PO5, PO9, PO10	PSO1, PSO2	03/09/19	26/08/19	30/08/19	05/09/19	
8	WAP to implement Merge Sort (Recursive).	1,3	CO1 CO3	PO1, PO5, PO9, PO10	PSO1, PSO2	17/09/19	02/09/19	06/09/19	05/09/19	
9	WAP to implement Stack using Array.	1,2	CO1, CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	01/10/19	02/09/19	20/09/19	19/09/19	
10	WAP to implement queue using Array.	1,2	CO1, CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	01/10/19	09/09/19	27/09/19	26/09/19	

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11	WAP to implement circular queue using Array.	1,2	CO1, CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	15/10/19	09/09/19	04/10/19	26/09/19	
12	WAP to implement Stack using Linked List.	1,2	CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	15/10/19	16/09/19	04/10/19	03/10/19	
13	WAP to implement queue using Linked List.	1,2	CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	15/10/19	16/09/19	01/11/19	03/10/19	
14	WAP to implement priority queue using Linked List.	1,2	CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	05/11/19	23/09/19	01/11/19	17/10/19	
15	WAP to implement solution of Tower of Hanoi problem using recursion.	2	CO4	PO1, PO5, PO9, PO10	PSO1, PSO2	05/11/19	30/09/19	01/11/19	31/10/19	

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16	WAP to implement Binary Search Tree.	1,5	CO4, CO5	PO1, PO5, PO9, PO10	PSO1, PSO2	05/11/19	14/10/19	08/11/19	07/11/19	
17	WAP to implement BFS (Graph Traversing algorithm)	4	CO4, CO5	PO1, PO5, PO9, PO10	PSO1, PSO2	19/11/19	14/10/19	08/11/19	14/11/19	
18	WAP to implement DFS.	4	CO4, CO5	PO1, PO5, PO9, PO10	PSO1, PSO2	19/11/19	04/11/19	15/11/19	14/11/19	
19	WAP to implement Kuruskal's algorithm to find minimum spanning tree of a given graph.	4	CO4, CO5	PO1, PO5, PO9, PO10	PSO1, PSO2	19/11/19	18/11/19	15/11/19	21/11/19	
20	WAP to implement warshall's algorithm to find all pair shortest path of a graph.	4	CO4, CO5	PO1, PO5, PO9, PO10	PSO1, PSO2	19/11/19	18/11/19	22/11/19	21/11/19	

  
 Name & Sign. Of Faculty  
 Dr. Somesh Kumar  
 Prof. & Head, CSE  
 Moradabad Institute of Technology  
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 Sign. Of Reviewer

  
 Sign. Of HOD

 In Pursuit of Excellence	<b>List of Students</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

**Batch:** A3

S.No.	Univ. Roll No.	Name
1	1808210046	Deeksha Singh
2	1808210047	Deependra Singh Raghav
3	1808210048	Deval Jhingran
4	1808210050	Devesh Bhardwaj
5	1808210051	Gagan
6	1808210052	Garvit Bhola
7	1808210053	Gaurang Gupta
8	1808210054	Gaurangee Bhardwaj
9	1808210055	Gaurav Bhatnagar
10	1808210056	Gaurav Kumar
11	1808210057	Geetika Gupta
12	1808210058	Hammad Hussain
13	1808210059	Harsh Gupta
14	1808210060	Harsh Vardhan
15	1808210061	Harshbeer Singh
16	1808210062	Harshit Kumar
17	1808210063	Harshit Pandey
18	1808210064	Honey Tyagi
19	1808210066	Iram Rafi
20	1808210067	Ishan Saxena

  
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**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

**Batch:** B1

S.No.	Univ. Roll No.	Name
1	1808210068	ISHITA AGARWAL
2	1808210069	ISHITA RASTOGI
3	1808210070	ISHVINDER SINGH
4	1808210071	JATIN TYAGI
5	1808210072	JUHI CHAUHAN
6	1808210073	KARTIK TIWARI
7	1808210074	KARTIK SHARMA
8	1808210075	KM RISHITA CHAUDHARY
9	1808210076	KM. VEENA RAJPOOT
10	1808210077	KRITI SHUKLA
11	1808210078	KSHITIZ VERMA
12	1808210079	KSHITIZ AGARWAL
13	1808210080	LOKESH YADAV
14	1808210081	MAHIMA SINGH
15	1808210082	MALLIKA SHARMA
16	1808210083	MANISH KUMAR
17	1808210084	MANJEET SINGH
18	1808210085	MANU TYAGI
19	1808210086	MANVEE TIWARI
20	1808210087	MAYANK AGARWAL

  
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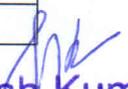
Lab Name: Data Structure Using C Lab  
Code: KCS351

Batch: B2

S. No.	Univ. Roll No.	Name
1	1808210088	MAYANK KUMAR
2	1808210089	MINAL SAGAR
3	1808210091	MOHD. ARIF
4	1808210092	MOHD MOIN
5	1808210093	MOHD. SUHAIL
6	1808210094	MOHD. ABDUL QADIR
7	1808210095	MOHD. NAZEESHAN
8	1808210096	MUHAMMAD FAIZAN
9	1808210097	MUKUL KUMAR
10	1808210098	MUKUL YADAV
11	1808210099	MURSHAD ALI
12	1808210100	MUSKAN BHATNAGAR
13	1808210101	MUSKAN SRIVASTAVA
14	1808210102	NAJMUS SAQIB
15	1808210103	NIRBHAY ARORA
16	1808210104	OSHIBA ALI
17	1808210105	PALLAVI TYAGI
18	1808210106	PANKAJ KUMAR VERMA
19	1808210107	PARAS NEGI
20	1808210108	PARAS PANDEY

Batch: C1

S. No.	Univ. Roll No.	Name
1	1808210131	SANKALP GUPTA
2	1808210132	SANSKRITI AGARWAL
3	1808210133	SARTHAK SAXENA
4	1808210134	SATAKSHI
5	1808210135	SAURABH KUMAR
6	1808210136	SAYYDUL MILLAT
7	1808210137	SHAZAR ZAIDI
8	1808210138	SHIVANI TYAGI
9	1808210139	SHIVANSH MATHUR
10	1808210140	SHIVANSH AGARWAL
11	1808210141	SHIVANSHU AGARWAL
12	1808210142	SHREY RUHELA
13	1808210143	SHREYA CHAUHAN
14	1808210144	SHUBH BHATNAGAR
15	1808210146	SHUBHAM YADAV

  
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 In Pursuit of Excellence	<b>Assessment Rubrics</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

Lab Name: Data Structure Using C Lab  
Code: KCS351

### Assessment using Continuous Internal Examination (CIE)

		High	Medium	Low	
Lab Continuous Evaluation	R1: Conduction (5 Marks)	Executed the Experiment/program with desired Input/output (5 Marks)	Partially executed the Experiment/program with Partial Input/output (1 - 4 Marks)	Experiment/program with desired Input/output was not executed (0 Marks)	Every Lab session
	R2: File record (5 Marks)	Completed Record was submitted (5 Marks)	Record was submitted but having minor mistakes (3 - 4 Marks)	Record was submitted but having major mistakes or not submitted at all (0 -2 Marks)	
	R3: Regularity (5 Marks)	Attended almost every lab session with 1 or 2 missed (5 Marks)	Attended lab sessions but missed 3 or 4 labs (4 Marks)	Not regular at all in labs, more than 4 misses (0 - 3 Marks)	
Lab Internal Examination	R4: Execution (15Marks)				At the end of semester
	R5: Write-up (10 Marks)				
	R6: Viva voce (5 Questions 5 marks Each, i.e., 25 Marks)				

Lab Internal Examination is taken of 50 Marks and scaled to 10 marks

  
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 In Pursuit of Excellence	<h2>Final Internal Marks</h2>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

**Batch:** A3

S. No.	Univ. Roll No.	Name	Max Marks	Lab Continuous Evaluation			Lab Internal Examination					Total Marks		
				R1	R2	R3	R4	R5	R6: Viva Voce					
									CO1	CO2	CO3		CO4	CO5
				5	5	5	15	10	5	5	5	5	5	25
1	1808210046	Deeksha Singh		3	5	5	15	10	5	5	4	5	4	23
2	1808210047	Deependra Singh Raghav		4	5	5	15	10	4	5	4	4	5	23
3	1808210048	Deval Jhingran		5	5	5	15	10	5	4	5	4	4	24
4	1808210050	Devesh Bhardwaj		5	5	5	15	10	4	4	5	4	4	24
5	1808210051	Gagan		4	5	5	15	10	5	4	5	5	5	24
6	1808210052	Garvit Bholia		4	5	5	15	10	5	4	4	5	5	24
7	1808210053	Gaurang Gupta		3	5	5	15	10	5	5	4	5	4	23
8	1808210054	Gaurangee Bhardwaj		5	5	5	15	10	4	5	4	4	5	24
9	1808210055	Gaurav Bhatnagar		4	4	4	12	8	5	4	5	5	4	21
10	1808210056	Gaurav Kumar		4	4	4	15	10	4	4	5	4	4	21
11	1808210057	Geetika Gupta		4	5	5	15	10	5	4	5	5	5	24
12	1808210058	Hammad Hussain		4	4	5	12	8	4	5	4	5	5	22
13	1808210059	Harsh Gupta		4	5	5	15	10	4	5	5	5	4	24
14	1808210060	Harsh Vardhan		4	4	4	10	8	5	5	4	5	5	20
15	1808210061	Harshbeer Singh		5	5	5	15	10	5	4	4	5	5	25
16	1808210062	Harshit Kumar		3	5	5	15	10	4	5	4	5	4	22
17	1808210063	Harshit Pandey		3	5	5	15	10	4	5	4	4	5	22
18	1808210064	Honey Tyagi		4	5	5	15	10	5	4	5	4	4	23
19	1808210066	Iram Rafi		4	5	5	15	10	4	4	5	4	4	23
20	1808210067	Ishan Saxena		4	5	5	15	10	5	4	5	5	5	24

  
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S.No.	Univ. Roll No.	Name	Max	Lab Continuous Evaluation			Lab Internal Examination					Total Marks		
				R1	R2	R3	R4	R5	R6: Viva Voce					
									CO1	CO2	CO3		CO4	CO5
				5	5	5	15	10	5	5	5	5	5	25
1	1808210068	ISHITA AGARWAL		4	3	4	15	10	4	3	2	3	3	19
2	1808210069	ISHITA RASTOGI		3	4	4	10	8	4	5	5	5	4	19
3	1808210070	ISHVINDER SINGH		3	4	4	10	8	5	5	4	5	5	19
4	1808210071	JATIN TYAGI		4	4	4	15	10	4	4	4	3	3	21
5	1808210072	JUHI CHAUHAN		4	3	4	15	10	3	5	4	3	4	20
6	1808210073	KARTIK TIWARI		3	4	4	10	8	4	5	4	4	5	19
7	1808210074	KARTIK SHARMA		4	3	4	15	10	3	3	3	2	2	19
8	1808210075	KM RISHITA CHAUDHARY		4	3	4	15	10	3	3	4	3	2	19
9	1808210076	KM. VEENA RAJPOOT		4	3	4	15	10	3	5	4	4	2	20
10	1808210077	KRITI SHUKLA		3	3	4	15	10	5	4	5	4	4	19
11	1808210078	KSHITIZ VERMA		4	3	4	15	10	3	4	3	3	4	19
12	1808210079	KSHITIZ AGARWAL		4	4	4	10	8	5	4	5	5	5	20
13	1808210080	LOKESH YADAV		3	3	4	10	10	3	5	3	4	3	18
14	1808210081	MAHIMA SINGH		4	4	4	15	10	4	3	3	3	4	20
15	1808210082	MALLIKA SHARMA		4	4	4	15	10	3	5	4	3	2	20
16	1808210083	MANISH KUMAR		4	5	5	15	10	5	4	4	5	5	24
17	1808210084	MANJEET SINGH		4	4	4	10	8	5	2	5	3	4	19
18	1808210085	MANU TYAGI		4	4	4	10	8	4	5	5	4	5	20
19	1808210086	MANVEE TIWARI		4	4	4	10	8	5	4	5	4	4	20
20	1808210087	MAYANK AGARWAL		4	4	4	10	8	4	4	5	4	4	20

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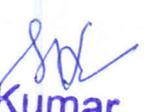
S. No.	Univ. Roll No.	Name	Max Marks	Lab Continuous Evaluation			Lab Internal Examination					Internal Marks		
				R1	R2	R3	R4	R5	R6: Viva Voce					
									CO1	CO2	CO3		CO4	CO5
				5	5	5	15	10	5	5	5	5	5	25
1	1808210088	MAYANK KUMAR		4	4	4	10	8	5	4	5	5	5	20
2	1808210089	MINAL SAGAR		4	4	4	12	8	4	5	5	5	5	21
3	1808210091	MOHD. ARIF		3	4	4	10	8	4	5	5	5	4	19
4	1808210092	MOHD MOIN		4	4	5	12	8	3	4	5	5	5	21
5	1808210093	MOHD. SUHAIL		3	5	5	12	8	5	5	4	5	4	22
6	1808210094	MOHD. ABDUL QADIR		4	5	5	15	10	5	5	4	4	5	24
7	1808210095	MOHD. NAZEEFSHAN		4	4	5	15	10	5	5	5	4	4	23
8	1808210096	MUHAMMAD FAIZAN		4	4	5	15	10	5	5	5	4	4	23
9	1808210097	MUKUL KUMAR		3	5	5	12	8	5	4	5	5	5	22
10	1808210098	MUKUL YADAV		3	5	5	12	8	4	5	4	5	5	22
11	1808210099	MURSHAD ALI		4	4	5	10	8	4	5	3	5	4	21
12	1808210100	MUSKAN BHATNAGAR		4	4	5	12	8	5	5	4	5	5	22
13	1808210101	MUSKAN SRIVASTAVA		4	5	4	15	10	3	3	3	5	5	22
14	1808210102	NAJMUS SAQIB		4	5	5	15	10	5	4	4	5	5	24
15	1808210103	NIRBHAY ARORA		4	5	4	12	8	5	5	4	5	4	22
16	1808210104	OSHIBA ALI		5	5	5	15	10	4	5	4	4	5	24
17	1808210105	PALLAVI TYAGI		4	5	4	15	10	5	4	5	4	4	22
18	1808210106	PANKAJ KUMAR VERMA		4	4	4	12	8	4	5	5	4	4	20
19	1808210107	PARAS NEGI		4	4	4	5	5	4	3	4	4	3	18
20	1808210108	PARAS PANDEY		5	5	5	15	10	4	5	4	5	5	25

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Lab Name: Data Structure Using C Lab  
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Batch: C1

S. No.	Univ. Roll No.	Name	Max Marks	Lab Continuous Evaluation					Lab Internal Examination					Internal Marks
				R1	R2	R3	R4	R5	R6: Viva Voce					
									CO 1	CO 2	CO 3	CO 4	CO 5	
				5	5	5	15	10	5	5	5	5	5	25
1	1808210131	SANKALP GUPTA		4	5	5	15	10	4	5	4	5	5	24
2	1808210132	SANSKRITI AGARWAL		5	5	5	15	10	3	4	4	5	5	24
3	1808210133	SARTHAK SAXENA		4	4	4	15	10	4	5	4	5	5	22
4	1808210134	SATAKSHI		3	4	4	15	8	3	4	5	4	4	20
5	1808210135	SAURABH KUMAR		4	5	5	15	10	5	4	5	5	5	24
6	1808210136	SAYYDUL MILLAT		3	5	4	10	10	4	3	5	2	4	20
7	1808210137	SHAZAR ZAIDI		4	5	5	15	10	4	5	5	5	4	24
8	1808210138	SHIVANI TYAGI		4	5	5	12	10	5	5	4	3	3	22
9	1808210139	SHIVANSH MATHUR		4	5	5	15	10	5	4	4	3	3	23
10	1808210140	SHIVANSH AGARWAL		5	5	5	15	10	5	4	4	5	5	25
11	1808210141	SHIVANSHU AGARWAL		4	5	4	15	10	5	5	5	3	4	22
12	1808210142	SHREY RUHELA		5	5	5	15	10	4	5	4	3	5	24
13	1808210143	SHREYA CHAUHAN		4	4	5	12	10	5	4	3	4	4	21
14	1808210144	SHUBH BHATNAGAR		5	5	5	15	10	5	5	3	4	4	24
15	1808210146	SHUBHAM YADAV		3	5	5	15	10	5	4	5	5	5	23

  
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# डा० ए०पी०जे० अब्दुल कलाम प्राविधिक विश्वविद्यालय, उत्तर प्रदेश, लखनऊ

Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

(Formerly Uttar Pradesh Technical University)

Sessional Marks Examination (सत्रिक परीक्षा)

### Sessional Brief (सत्रिक हस्तिलेख)

Institute Code & Name : MORADABAD INSTITUTE OF TECHNOLOGY, MORADABAD ( 082 )  
 Course Code & Name : B.Tech  
 Branch Code & Name : Computer Science and Engineering  
 Semester : 3  
 Faculty Name : Vikas Kumar  
 Subject Code : KC5351  
 Marks Type :  
 Is Finally Submitted to University : True (\* will be TRUE after submitting to university by your college.)

Print (सत्रिक नॉट)

### Sessional Marks (सत्रिक अंक)

Sl. No. (सत्रिक क्रमांक)	Roll No. (सत्रिक अंक)	Name (सत्रिक नाम)	Obt.(CT) प्राप्त (CT)	Max.(CT) अधिकतम (CT)	Obt. TA (Assign./Att.)	Max. TA (Assign./Att.)	Obt. CT+TA	Max. CT+TA	Remark (सत्रिक टिप्पणी)
1	1808210001	AASHISH PAL	0	21	25	21	25		
2	1808210002	ABHAY VARSHNEY	0	20	25	20	25		
3	1808210003	ABHAY PRATAP SINGH	0	21	25	21	25		
4	1808210005	ABHISHEK	0	20	25	20	25		
5	1808210006	ABHISHEK KUMAR	0	20	25	20	25		
6	1808210007	ABHISHEK SHARMA	0	20	25	20	25		
7	1808210009	ACHAL GUPTA	0	19	25	19	25		
8	1808210010	ADARSH UPADHAYAY	0	19	25	19	25		
9	1808210011	AHAD NUSRAT	0	16	25	16	25		
10	1808210013	AKASH BHATNAGAR	0	20	25	20	25		
11	1808210014	AKASH JAUHARI	0	16	25	16	25		
12	1808210015	AKASH KUMAR	0	23	25	23	25		
13	1808210016	AKHIL KUMAR	0	20	25	20	25		
14	1808210017	AKSHITA VERMA	0	24	25	24	25		
15	1808210018	AMAN KUMAR	0	16	25	16	25		
16	1808210019	AMAN VAISH	0	21	25	21	25		
17	1808210020	AMBIKA MALHOTRA	0	23	25	23	25		
18	1808210021	AMJR	0	19	25	19	25		
19	1808210022	AMOL JAIN	0	20	25	20	25		
20	1808210023	ANIKET SINGH	0	19	25	19	25		
21	1808210026	ANIL KUMAR	0	19	25	19	25		
22	1808210027	ANIL KUMAR	0	22	25	22	25		
23	1808210028	ANKIT CHANDRA	0	18	25	18	25		
24	1808210029	ANKIT KUMAR	0	18	25	18	25		
25	1808210030	ANKUSH TYAGI	0	24	25	24	25		
26	1808210031	ANKUSH TYAGI	0	16	25	16	25		
27	1808210032	ANSHIKA GOEL	0	24	25	24	25		
28	1808210033	ANUSHAY MISHRA	0	23	25	23	25		
29	1808210034	ANUSHAY SHUKLA	0	17	25	17	25		
30	1808210035	ASEEM GUPTA	0	24	25	24	25		
31	1808210037	AVNISH KUMAR	0	20	25	20	25		
32	1808210038	AVNISH KUMAR SINGH	0	17	25	17	25		
33	1808210039	AVYUSH SHARMA	0	24	25	24	25		
34	1808210040	BHASKAR SAINI	0	20	25	20	25		
35	1808210041	BHUVNESH KUMAR SHARMA	0	22	25	22	25		
36	1808210042	BIJAL SAIFI	0	22	25	22	25		
37	1808210043	BIBI KHAN	0	16	25	16	25		
38	1808210044	CHANDR VEER SINGH	0	20	25	20	25		
39	1808210046	DEEKSHA SINGH	0	23	25	23	25		
40	1808210047	DEEPTHRA SINGH RAJHAY	0	23	25	23	25		
41	1808210048	DEVAL JINGRAN	0	24	25	24	25		
42	1808210050	DEVESH BHARDWAJ	0	24	25	24	25		
43	1808210051	DIGAN	0	24	25	24	25		
44	1808210052	DARVIT BHOLA	0	24	25	24	25		
45	1808210053	DAURAND GUPTA	0	23	25	23	25		
46	1808210054	DEVIKANTH BHARDWAJ	0	24	25	24	25		
47	1808210055	DEVIKANTH BHARDWAJ	0	21	25	21	25		
48	1808210056	DEVIKANTH KUMAR	0	21	25	21	25		
49	1808210057	DEVIKANTH GUPTA	0	24	25	24	25		
50	1808210058	DEVIKANTH KUMAR	0	22	25	22	25		
51	1808210059	DARSH GUPTA	0	24	25	24	25		
52	1808210060	DARSH YADHAN	0	20	25	20	25		
53	1808210061	DARSH YADHAN	0	25	25	25	25		
54	1808210062	DARSH YADHAN	0	24	25	24	25		
55	1808210063	DARSH YADHAN	0	21	25	21	25		
56	1808210064	DARSH YADHAN	0	21	25	21	25		
57	1808210065	DARSH YADHAN	0	21	25	21	25		
58	1808210066	DARSH YADHAN	0	23	25	23	25		
59	1808210067	DARSH YADHAN	0	24	25	24	25		
60	1808210068	DARSH YADHAN	0	19	25	19	25		
61	1808210070	DARSH YADHAN	0	19	25	19	25		
62	1808210071	DARSH YADHAN	0	21	25	21	25		
63	1808210072	DARSH YADHAN	0	20	25	20	25		
64	1808210073	DARSH YADHAN	0	19	25	19	25		
65	1808210074	DARSH YADHAN	0	19	25	19	25		

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66	1808210075	KM RISHITA CHAUDHARY	0	19	25	19	25
67	1808210076	KM VEENA RAJPOOT	0	20	25	20	25
68	1808210077	KRITI SHUKLA	0	19	25	19	25
69	1808210078	KSHITIZ VERMA	0	19	25	19	25
70	1808210079	KSHITIZ AGARWAL	0	20	25	20	25
71	1808210080	LOKESH YADAV	0	18	25	18	25
72	1808210081	MAHIMA SINGH	0	20	25	20	25
73	1808210082	MALLIKA SHARMA	0	20	25	20	25
74	1808210083	MANISH KUMAR	0	24	25	24	25
75	1808210084	MANJEET SINGH	0	19	25	19	25
76	1808210085	MANU TYAGI	0	20	25	20	25
77	1808210086	MANVEE TIWARI	0	20	25	20	25
78	1808210087	MAYANK AGARWAL	0	20	25	20	25
79	1808210088	MAYANK KUMAR	0	20	25	20	25
80	1808210089	MINAL SAGAR	0	21	25	21	25
81	1808210091	MOHD ARIF	0	19	25	19	25
82	1808210092	MOHD NOJIN	0	21	25	21	25
83	1808210093	MOHD SUHAIL	0	22	25	22	25
84	1808210094	MOHD ABDUL QADIR	0	24	25	24	25
85	1808210095	MOHD NAZEEF SHAN	0	23	25	23	25
86	1808210096	MUHAMMAD FAIZAN	0	23	25	23	25
87	1808210097	MUKUL	0	22	25	22	25
88	1808210098	MUKUL YADAV	0	22	25	22	25
89	1808210099	MURSHAD ALI	0	21	25	21	25
90	1808210100	MUSKAN BHATNAGAR	0	22	25	22	25
91	1808210101	MUSKAN SRIVASTAVA	0	22	25	22	25
92	1808210102	NAJMUS SAQIB	0	24	25	24	25
93	1808210103	NIRBHAY ARORA	0	22	25	22	25
94	1808210104	OSHIBA ALI	0	24	25	24	25
95	1808210105	PALLAVI TYAGI	0	22	25	22	25
96	1808210106	PANKAJ KUMAR VERMA	0	20	25	20	25
97	1808210107	PARAS NEGI	0	18	25	18	25
98	1808210108	PARAS PANDEY	0	25	25	25	25
99	1808210110	PAVEE CHOUDHARY	0	24	25	24	25
100	1808210111	PEEYUSH KUMAR	0	20	25	20	25
101	1808210113	PRACHI SAGAR	0	20	25	20	25
102	1808210114	PRACHI CHAUHAN	0	22	25	22	25
103	1808210115	PRASHANT BANSAL	0	24	25	24	25
104	1808210116	PRIYANSHU MURARI	0	17	25	17	25
105	1808210117	RAHUL	0	20	25	20	25
106	1808210118	RASHI TYAGI	0	20	25	20	25
107	1808210119	RASTOGI SURBHI	0	22	25	22	25
108	1808210120	RITIK SRIVASTAVA	0	23	25	23	25
109	1808210121	RITIKA CHAUDHARY	0	25	25	25	25
110	1808210122	RITVIK TYAGI	0	22	25	22	25
111	1808210123	RIYA JAIN	0	25	25	25	25
112	1808210124	RIZWAN	0	23	25	23	25
113	1808210125	ROHIT GAUTAM	0	20	25	20	25
114	1808210126	SACHIN DIVAKER	0	20	25	20	25
115	1808210129	SAMARTH PATHAK	0	24	25	24	25
116	1808210130	SANJANA DUBEY	0	24	25	24	25
117	1808210131	SANKALP GUPTA	0	24	25	24	25
118	1808210132	SANSKRITI AGARWAL	0	24	25	24	25
119	1808210133	SARTHAK SAXENA	0	22	25	22	25
120	1808210134	SATAKSHI	0	20	25	20	25
121	1808210135	SAURABH KUMAR	0	24	25	24	25
122	1808210136	SAYYDUL MILLAT	0	20	25	20	25
123	1808210137	SHAZAR ZAIDI	0	24	25	24	25
124	1808210138	SHIVANI TYAGI	0	22	25	22	25
125	1808210139	SHIVANSH MATHUR	0	23	25	23	25
126	1808210140	SHIVANSH AGARWAL	0	25	25	25	25
127	1808210141	SHIVANSHU AGARWAL	0	22	25	22	25
128	1808210142	SHREY RUHELA	0	24	25	24	25
129	1808210143	SHREYA CHAUHAN	0	21	25	21	25
130	1808210144	SHUBH BHATNAGAR	0	24	25	24	25
131	1808210146	SHUBHAM YADAV	0	23	25	23	25
132	1808210147	SHUBHIKA SINGH	0	23	25	23	25
133	1808210148	SOURABH SAINI	0	22	25	22	25
134	1808210149	SPARSH RASTOGI	0	23	25	23	25
135	1808210150	SRIJAN PANDEY	0	21	25	21	25
136	1808210151	SUFIYA	0	25	25	25	25
137	1808210152	SUHAIL AHMED	0	21	25	21	25
138	1808210153	SUKRITI SINGH	0	24	25	24	25
139	1808210154	SUMIT KUMAR	0	23	25	23	25
140	1808210155	SUSHANT KUMAR	0	24	25	24	25
141	1808210156	SUSHANT SINGH	0	22	25	22	25
142	1808210157	TANVEER ALAM	0	25	25	25	25
143	1808210158	UDIT RAJPUT	0	23	25	23	25
144	1808210159	UMANG MATHUR	0	21	25	21	25
145	1808210160	UNNATI GANDWAR	0	21	25	21	25
146	1808210161	UNNATI SINGH	0	21	25	21	25
147	1808210162	UTKARSH GUPTA	0	21	25	21	25
148	1808210164	VASU GOEL	0	22	25	22	25
149	1808210165	VASUNDHRA GUPTA	0	23	25	23	25
150	1808210166	VEDIKA AGARWAL	0	20	25	20	25
151	1808210167	VINAYAK VARSHNEY	0	25	25	25	25
152	1808210168	VIRENDRA MOHAN	0	19	25	19	25
153	1808210170	VISHAL TYAGI	0	20	25	20	25
154	1808210171	YASH AGARWAL	0	24	25	24	25
155	1808210172	ZAMAN ABBAS	0	18	25	18	25
156	1900820109001	VISHAL SAINI	0	24	25	24	25
157	1900820109002	ANUJ SHARMA	0	23	25	23	25
158	1900820109003	HADIYA KHALIQA	0	24	25	24	25
159	1900820109004	SATYAM RASTOGI	0	23	25	23	25
160	1900820109005	UDIT	0	23	25	23	25
161	1900820109006	ZARREEN AQID	0	21	25	21	25

 In Pursuit of Excellence	<b>CO Attainment</b>	SESSION-2019-2020
		SEM- 3 <sup>rd</sup>

**Lab Name:** Data Structure Using C Lab  
**Code:** KCS351

**CO Attainment and Analysis**

**CO Attainment using Continuous Internal Examination (CIE)**

Course Code	CO	CO Attained (% of students getting $\geq 80\%$ marks)	CO Attained (On Scale of 3)
KCS351	CO1	78.26	2.35
	CO2	83.23	2.5
	CO3	79.5	2.39
	CO4	78.26	2.35
	CO5	80.75	2.42

**CO Attainment using Semester End Examination (SEE)**

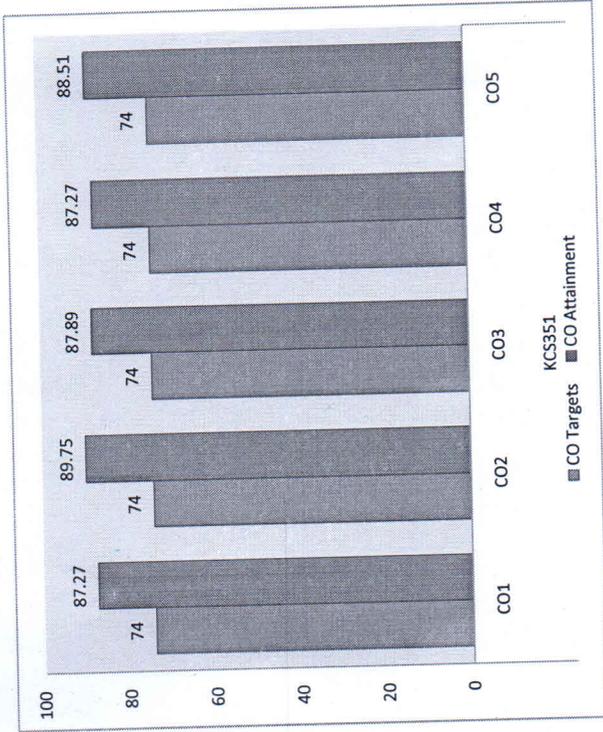
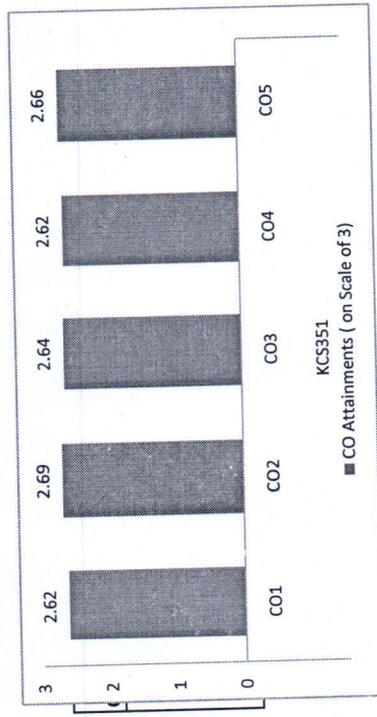
Course Code	CO	CO Attained (% of students getting $\geq 80\%$ marks)	CO Attained (On Scale of 3)
KCS351	CO1	96.27	2.89
	CO2	96.27	2.89
	CO3	96.27	2.89
	CO4	96.27	2.89
	CO5	96.27	2.89

**CO Attainment (CO)**

Course Code	CO	CO Attained Using CIE (CO_CIE)	CO Attained using SEE (CO_SEE)	CO Attainment ( $CO = 0.5 \cdot CO\_CIE + 0.5 \cdot CO\_SEE$ )	CO Attainment (On Scale of 3)
KCS351	CO1	78.26	96.27	87.27	2.62
	CO2	83.23	96.27	89.75	2.69
	CO3	79.5	96.27	87.89	2.64
	CO4	78.26	96.27	87.27	2.62
	CO5	80.75	96.27	88.51	2.66

  
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Course Code	CO	CO Targets	CO Attainment	Y/N
KCS351	CO1	74	87.27	Y
	CO2	74	89.75	Y
	CO3	74	87.89	Y
	CO4	74	87.27	Y
	CO5	74	88.51	Y



  
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### CO Attainment Gap

Course Code	CO	CO Targets	CO Attainment	CO Attainment Gap (Target - Attainment)
KCS351	CO1	74	87.27	-13.27
	CO2	74	89.75	-15.75
	CO3	74	87.89	-13.89
	CO4	74	87.27	-13.27
	CO5	74	88.51	-14.51

If Gap > 0 : Target not attained  
If Gap ≤ 0 : Target attained

### Closure of Quality Loop

Course Code	CO	CO Targets	CO Attainment Gap	Action proposed to bridge the gap where targets are not achieved	Modification of targets where Achieved
KCS351	CO1	74	-13.27		Target increased to 75%
	CO2	74	-15.75		Target increased to 76%
	CO3	74	-13.89		Target increased to 75%
	CO4	74	-13.27		Target increased to 75%
	CO5	74	-14.51		Target increased to 75%

  
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