Kanpur Institute of Technology, Kanpur		
Common Data Input Sheet		
Semester: 3rd	Name of the Faculty: Mohd Arif	
Subject Code: KEE 302	Total No. of Students: 16	Subject Name: Electrical Measurements & Instrumentation

CO DESCRIPTION TABLE	
CO LIST	DESCRIPTION
CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.

CO-PO Matrix																	
S.No.	CO/PO	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	CO1	A	3	2	2	2	1	-	-	-	-	2	-	2	2	2	2
2	CO2	A	2	3	2	2	1	-	-	-	-	2	-	2	2	2	2
3	CO3	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
4	CO4	A	3	3	3	2	2	-	-		-	2	-	2	2	2	2
5	CO5	A	3	3	3	2	2					2		2	2	2	2

(Please Fill up 'NA' in STATUS COLUMN if any CO is NOT APPLICABLE)

Kanpur Institute of Technology, Kanpur										
Assessment Sheet for PU										
Semester: 3rd			**Name of the Faculty: Mohd Arif**						**Subject Code: KEE 302**	
CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.									
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.									
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CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.									

S.No	SEC	Roll No	Student Name	Total Present Status	Internal CO marks	Out of	CO attained APPLICABLE			
							CO	AL:1	AL:2	AL:3
Distribution of Marks				**16**	**50**	**50**	**50**	**<40%**	**>=40% & <60%**	**>=60%**
1	A	2001650210001	ADARSH PANDEY	P	35	35	35	0	0	1
2	A	2001650210002	AKASH GUPTA	P	24	24	24	0	1	0
3	A	2001650210003	ANJALI VERMA	P	47	47	47	0	0	1
4	A	2001650210004	GOPAL GUPTA	P	42	42	42	0	0	1
5	A	2001650210005	HARSH AGNIHOTRI	P	40	40	40	0	0	1
6	A	2001650210007	RAM BAHADUR SINGH	P	41	41	41	0	0	1
7	A	2001650210008	RISHABH MISHRA	P	34	34	34	0	0	1
8	A	2001650210009	SAURABH KUMAR SINGH	P	48	48	48	0	0	1
9	A	2001650210010	SAURABH YADAV	P	32	32	32	0	0	1
10	A	2001650210011	SHAIFALI SINGH	P	50	50	50	0	0	1
11	A	2001650210012	TANUPRIYA PANDEY	P	50	50	50	0	0	1
12	A	2001650210013	VAIBHAV MISHRA	P	36	36	36	0	0	1
13	A	2001650210014	VIKRANT SINGH	P	34	34	34	0	0	1
14	A	2101650219001	AMAAN HASSAN	P	38	38	38	0	0	1
15	A	2101650219003	MEENAKSHI PRAJAPATI	P	37	37	37	0	0	1
16	A	2101650219004	ROHIT SAXENA	P	29	29	29	0	1	0
						Total		**0**	**2**	**14**
						% Student	**CO**	**0**	**12.5**	**87.5**
						% CO attained		**95.83**		

Kanpur Institute of Technology, Kanpur

Assessment Sheet for Feedback

Semester: 3rd	**Name of the Faculty: Mohd Arif**
Subject Code: KEE 302	**Subject Name: Electrical Measurements & Instrumentation**

CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.

Total Students	**16**

Course Outcomes					**CO1 Feedback**	**CO2 Feedback**	**CO3 Feedback**	**CO4 feedback**	**CO5 feedback**
CO1	**CO2**	**CO3**	**CO4**	**CO5**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**
A	**A**	**A**	**A**	**A**					
No of students in option1 (3)					11	10	9	14	15
No. of students for option2 (2)					2	3	5	1	1
No. of students in option3 (1)					3	2	1	1	0
No. of students in option4 (0)					0	1	1	0	0
					16	16	16	16	16

Kanpur Institute of Technology, Kanpur	
Assessment Sheet for UNIVERSITY	
Semester: 3rd	**Name of the Faculty: Mohd Arif**
Subject Code: KEE 302	**Subject Name: Electrical Measurements & Instrumentation**

CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.

S.No	SEC	Roll No	Student Name	Total Present Status	From University	Out of	UNIVERSITY ATTAINTMENT APPLICABLE		
							AL:1	AL:2	AL:3
Distribution of Marks				**16**	**100**	**100**	**<40%**	**>=40% & <60%**	**>=60%**
1	A	2001650210001	ADARSH PANDEY	P	53	53	0	1	0
2	A	2001650210002	AKASH GUPTA	P	30	30	1	0	0
3	A	2001650210003	ANJALI VERMA	P	48	48	0	1	0
4	A	2001650210004	GOPAL GUPTA	P	63	63	0	0	1
5	A	2001650210005	HARSH AGNIHOTRI	P	60	60	0	0	1
6	A	2001650210007	RAM BAHADUR SINGH	P	42	42	0	1	0
7	A	2001650210008	RISHABH MISHRA	P	35	35	1	0	0
8	A	2001650210009	SAURABH KUMAR SINGH	P	74	74	0	0	1
9	A	2001650210010	SAURABH YADAV	P	38	38	1	0	0
10	A	2001650210011	SHAIFALI SINGH	P	70	70	0	0	1
11	A	2001650210012	TANUPRIYA PANDEY	P	73	73	0	0	1
12	A	2001650210013	VAIBHAV MISHRA	P	35	35	1	0	0
13	A	2001650210014	VIKRANT SINGH	P	60	60	0	0	1
14	A	2101650219001	AMAAN HASSAN	P	34	34	1	0	0
15	A	2101650219003	MEENAKSHI PRAJAPATI	P	42	42	0	1	0
16	A	2101650219004	ROHIT SAXENA	P	47	47	0	1	0
						Total	**5**	**5**	**6**
						% Student	**31.25**	**31.25**	**37.5**
						% CO attained	**68.75**		

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for CO Attainment		
Semester: 3rd	**Name of the Faculty: Mohd Arif**	
Subject Code: KEE 302	**Total No. of Students: 16**	**Subject Name: Electrical Measurements & Instrumentation**
CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.	
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.	
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.	
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.	
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.	

Direct Assessment						
S.No.	**Exam**	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
1	**Internal**	**95.83**	**95.83**	**95.83**	**95.83**	**95.83**
Average		**95.83**	**95.83**	**95.83**	**95.83**	**95.83**

Average % Students Attained Course Outcomes					
S.N.	**Course Outcome**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (Internal)**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (University)**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (Indirect - Survey)**	**Goal**
1	CO1	95.83	68.75	83.33	60
2	CO2	95.83	68.75	79.17	60
3	CO3	95.83	68.75	79.17	60
4	CO4	95.83	68.75	93.75	60
5	CO5	95.83	68.75	97.92	60
Average % Students Attained Course Outcomes		95.83	68.75	86.67	60.00

Weigtage of attainment level	
Direct Assessment	80%
Internal Assessment	60%
University Assessment	40%
Indirect Assessment	20%

% of students attained the outcome					
Assessment Types	**% of students attained CO1**	**% of students attained CO2**	**% of students attained CO3**	**% of students attained CO4**	**% of students attained CO5**
Internal Assessment (I)	**95.83**	**95.83**	**95.83**	**95.83**	**95.83**
University Assessment (U)	**68.75**	**68.75**	**68.75**	**68.75**	**68.75**
Direct Assessment (DI) DI=0.6*I + 0.4* U	**85.00**	**85.00**	**85.00**	**85.00**	**85.00**
Indirect Assessment (ID)	**83.33**	**79.17**	**79.17**	**93.75**	**97.92**
Total = 0.8*DI + 0.2*ID	**84.67**	**83.83**	**83.83**	**86.75**	**87.58**

Attainment Level: Rationale		
EE	**Exceed Expectation**	**Attainment > 5% above the goal**
ME	**Meet Expectation**	**5% below the goal<=Attainment < 5% above the goal**
BE	**Below Expectation**	**Attainment <5% below the goal**

Code	**Description**	**Goal (%)**	**Attainment obtained**	**Attainment Level**
EE	Attainment obtained > 58%	60.00	Attainment value > 63	3
ME	Attainment obtained between 52.% to 58%		57 <= Attainment value > 63	2
BE	Attainment obtained below 52%		Attainment value <57	1

% of students attained the outcome w.r.t attainment level					
Assessment Types	**% of students attained CO1**	**% of students attained CO2**	**% of students attained CO3**	**% of students attained CO4**	**% of students attained CO5**
Internal Assessment (I)	**3**	**3**	**3**	**3**	**3**
University Assessment (U)	**3**	**3**	**3**	**3**	**3**
Direct Assessment (DI) DI=0.6*I + 0.4* U	**3**	**3**	**3**	**3**	**3**
Indirect Assessment (ID)	**3**	**3**	**3**	**3**	**3**
Total = 0.8*DI + 0.2*ID	**3**	**3**	**3**	**3**	**3**

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for Indirect Assesment		
Semester: 3rd	Name of the Faculty: Mohd Arif	
Subject Code: KEE 302	Total No. of Students: 16	Subject Name: Electrical Measurements & Instrumentation

CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.

Indirect Survay Table		
Options	**Description**	**Value**
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Students feedback Matrix					Total No. of Participants				0
S.No	**Course Outcome**	**Total students participated in feedback**	**No of students in option1 (3)**	**No. of students for option2 (2)**	**No. of students in option3 (1)**	**No. of students in option4 (0)**	**Total Point**	**Total point attained**	**% Attained**
1	**CO1**	16	11	2	3	0	48	40	83.33
2	**CO2**	16	10	3	2	1	48	38	79.17
3	**CO3**	16	9	5	1	1	48	38	79.17
4	**CO4**	16	14	1	1	0	48	45	93.75
5	**CO5**	16	15	1	0	0	48	47	97.92
Average % Students who Attained Course Outcomes									86.67

CO-PO Matrix

S.No.	CO/PO	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**CO1**	A	3	2	2	2	1	-	-	-	-	2	-	2	2	2	2
2	**CO2**	A	2	3	2	2	1	-	-	-	-	2	-	2	2	2	2
3	**CO3**	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
4	**CO4**	A	3	3	3	2	2	-	-		-	2	-	2	2	2	2
5	**CO5**	A	3	3	3	2	2					2		2	2	2	2
Average PO			2.8	2.8	2.6	2	1.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2	#DIV/0!	2	2	2	2

Indirect Attainment of CO

S.No.	Exam	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**CO1**	A	2.50	1.67	1.67	1.67	0.83					1.67		1.67	1.67	1.67	1.67
2	**CO2**	A	1.58	2.38	1.58	1.58	0.79					1.58		1.58	1.58	1.58	1.67
3	**CO3**	A	2.38	2.38	2.38	1.58	1.58					1.58		1.58	1.58	1.58	1.67
4	**CO4**	A	2.81	2.81	2.81	1.88	1.88					1.88		1.88	1.88	1.88	1.67
5	**CO5**	A	2.94	2.94	2.94	1.96	1.96					1.96		1.96	1.96	1.96	1.67
Average PO			2.44	2.43	2.28	1.73	1.41	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.73	#DIV/0!	1.73	1.73	1.73	1.67

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for PO Attainment		
Semester: 3rd	Name of the Faculty: Mohd Arif	
Subject Code: KEE 302	Total No. of Students: 16	Subject Name: Electrical Measurements & Instrumentation

MAPPING OF COURSE OUTCOME WITH PROGRAM OUTCOMES/PROGRAM SPECIFIC OUTCOME

S.No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	CO1	3.00	2.00	2.00	2.00	1.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
2	CO2	2.00	3.00	2.00	2.00	1.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
3	CO3	3.00	3.00	3.00	2.00	2.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
4	CO4	3.00	3.00	3.00	2.00	2.00	-	-		-	2.00	-	2.00	2.00	2.00	2.00
5	CO5	3.00	3.00	3.00	2.00	2.00					2.00		2.00	2.00	2.00	2.00
Average CO		2.80	2.80	2.60	2.00	1.60	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2.00	#DIV/0!	2.00	2.00	2.00	2.00

Direct Assessment (Internal + University)

S.No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	% of students attained CO
1	CO1	2.55	1.70	1.70	1.70	0.85					1.70		1.70	1.70	1.70	1.70	85.00
2	CO2	1.70	2.55	1.70	1.70	0.85					1.70		1.70	1.70	1.70	1.70	85.00
3	CO3	2.55	2.55	2.55	1.70	1.70					1.70		1.70	1.70	1.70	1.70	85.00
4	CO4	2.55	#REF!	2.55	1.70	1.70					1.70		1.70	1.70	1.70	1.70	85.00
5	CO5	2.55	2.55	2.55	1.70	1.70					1.70		1.70	1.70	1.70	1.70	85.00
Average PO		2.38	#REF!	2.21	1.70	1.36					1.70		1.70	1.70	1.70	1.70	85.00

Indirect Attainment of CO

S.No.	Exam	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	% of student Indirect Attained
1	CO1	2.50	1.67	1.67	1.67	0.83					1.67		1.67	1.67	1.67	1.67	83.33
2	CO2	1.58	2.38	1.58	1.58	0.79					1.58		1.58	1.58	1.58	1.67	79.17
3	CO3	2.38	2.38	2.38	1.58	1.58					1.58		1.58	1.58	1.58	1.67	79.17
4	CO4	2.81	2.81	2.81	1.88	1.88					1.88		1.88	1.88	1.88	1.67	93.75
5	CO5	2.94	2.94	2.94	1.96	1.96					1.96		1.96	1.96	1.96	1.67	97.92
Average PO		2.44	2.43	2.28	1.73	1.41					1.73		1.73	1.73	1.73	1.67	86.67

PO Attainment

Attainment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct(D)	2.38	#REF!	2.21	1.70	1.36					1.70		1.70	1.70	1.70	1.70
Indirect(I)	2.44	2.43	2.28	1.73	1.41					1.73		1.73	1.73	1.73	1.67
Total=.8*D+0.2*I	2.39	#REF!	2.22	1.71	1.37					1.71		1.71	1.71	1.71	1.69

Kanpur Institute of Technology, Kanpur			VALUE
Feedback			
Semester: 3rd	Name of the Faculty: Mohd Arif		
Subject Code: KEE 302	Total No. of Students: 16	Subject Name: Electrical Measurements & Instrumentation	
CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.		To be filled by students
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.		To be filled by students
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.		To be filled by students
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.		To be filled by students
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.		To be filled by students

Indirect Survay Table		
Options	Description	Value
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Name & Signature of the Student

Kanpur Institute of Technology, Kanpur			VALUE
Feedback			
Semester: 3rd	Name of the Faculty: Mohd Arif		
Subject Code: KEE 302	Total No. of Students: 16	Subject Name: Electrical Measurements & Instrumentation	
CO1	Evaluate errors in measurement as well as identify and use different types of instruments for the measurement of voltage, current, power and energy.		To be filled by students
CO2	Display the knowledge of measurement of electrical quantities resistance, inductance and capacitance with the help of bridges.		To be filled by students
CO3	Demonstrate the working of instrument transformers as well as calculate the errors in current and potential transformers.		To be filled by students
CO4	Manifest the working of electronic instruments like voltmeter, multi-meter, frequency meter and CRO.		To be filled by students
CO5	Display the knowledge of transducers, their classifications and their applications for the measurement of physical quantities like motion, force, pressure, temperature, flow and liquid level.		To be filled by students

Indirect Survay Table		
Options	Description	Value
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Name & Signature of the Student

Kanpur Institute of Technology, Kanpur		
Common Data Input Sheet		
Semester: IV	**Name of the Faculty: Mr. SHASHANK SRIVASTAVA**	
Subject Code: KEE-401	**Total No. of Students: 16**	**Subject Name: DIGITAL ELECTRONICS**

CO DESCRIPTION TABLE	
CO LIST	**DESCRIPTION**
CO1	Apply concepts of Digital Binary System and implementation of Gates.
CO2	Analyze and design of Combinational logic circuits.
CO3	Analyze and design of Sequential logic circuits with their applications.
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.
CO5	Apply the concept of Digital Logic Families with circuit implementation.

CO-PO Matrix

S.No.	CO/PO	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**CO1**	A	3	2	2	2	1	-	-	-	-	2	-	2	2	2	2
2	**CO2**	A	2	3	2	2	1	-	-	-	-	2	-	2	2	2	2
3	**CO3**	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
4	**CO4**	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
5	**CO5**	A	3	3	3	2	2					2		2	2	2	2

(Please Fill up 'NA' in STATUS COLUMN if any CO is NOT APPLICABLE)

Kanpur Institute of Technology, Kanpur										
Assessment Sheet for PU										
Semester: IV			**Name of the Faculty: Mr. SHASHANK SRIVASTAVA**							**Subject Code: KEE-401**
CO1	Apply concepts of Digital Binary System and implementation of Gates.									
CO2	Analyze and design of Combinational logic circuits.									
CO3	Analyze and design of Sequential logic circuits with their applications.									
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.									
CO5	Apply the concept of Digital Logic Families with circuit implementation.									

S.No	SEC	Roll No	Student Name	Total Present Status	Internal CO marks	Out of	CO attained APPLICABLE			
							CO	AL:1	AL:2	AL:3
Distribution of Marks				**16**	**50**	**50**	**50**	**<40%**	**>=40% & <60%**	**>=60%**
1	A	2001650210001	ADARSH PANDEY	P	41	41	41	0	0	1
2	A	2001650210002	AKASH GUPTA	P	35	35	35	0	0	1
3	A	2001650210003	ANJALI VERMA	P	50	50	50	0	0	1
4	A	2001650210004	GOPAL GUPTA	P	50	50	50	0	0	1
5	A	2001650210005	HARSH AGNIHOTRI	P	47	47	47	0	0	1
6	A	2001650210007	RAM BAHADUR SINGH	P	48	48	48	0	0	1
7	A	2001650210008	RISHABH MISHRA	P	39	39	39	0	0	1
8	A	2001650210009	SAURABH KUMAR SINGH	P	50	50	50	0	0	1
9	A	2001650210010	SAURABH YADAV	P	39	39	39	0	0	1
10	A	2001650210011	SHAIFALI SINGH	P	50	50	50	0	0	1
11	A	2001650210012	TANUPRIYA PANDEY	P	50	50	50	0	0	1
12	A	2001650210013	VAIBHAV MISHRA	P	39	39	39	0	0	1
13	A	2001650210014	VIKRANT SINGH	P	47	47	47	0	0	1
14	A	2101650219001	AMAAN HASSAN	P	30	30	30	0	0	1
15	A	2101650219003	MEENAKSHI PRAJAPATI	P	44	44	44	0	0	1
16	A	2101650219004	ROHIT SAXENA	P	38	38	38	0	0	1
						Total	**CO**	**0**	**0**	**16**
						% Student		**0**	**0**	**100**
						% CO attained		**100**		

Kanpur Institute of Technology, Kanpur	
Assessment Sheet for Feedback	
Semester: IV	**Name of the Faculty: Mr. SHASHANK SRIVASTAVA**
Subject Code: KEE-401	**Subject Name: DIGITAL ELECTRONICS**
CO1	Apply concepts of Digital Binary System and implementation of Gates.
CO2	Analyze and design of Combinational logic circuits.
CO3	Analyze and design of Sequential logic circuits with their applications.
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.
CO5	Apply the concept of Digital Logic Families with circuit implementation.

Total Students	**16**

Course Outcomes					**CO1 Feedback**	**CO2 Feedback**	**CO3 Feedback**	**CO4 feedback**	**CO5 feedback**
CO1	**CO2**	**CO3**	**CO4**	**CO5**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**	**APPLICABLE**
A	**A**	**A**	**A**	**A**					
No of students in option1 (3)					8	7	7	5	6
No. of students for option2 (2)					4	6	6	6	5
No. of students in option3 (1)					4	3	2	4	4
No. of students in option4 (0)					0	0	1	1	1
					16	16	16	16	16

Kanpur Institute of Technology, Kanpur	
Assessment Sheet for UNIVERSITY	
Semester: IV	**Name of the Faculty: Mr. SHASHANK SRIVASTAVA**
Subject Code: KEE-401	**Subject Name: DIGITAL ELECTRONICS**

CO1	Apply concepts of Digital Binary System and implementation of Gates.
CO2	Analyze and design of Combinational logic circuits.
CO3	Analyze and design of Sequential logic circuits with their applications.
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.
CO5	Apply the concept of Digital Logic Families with circuit implementation.

S.No	SEC	Roll No	Student Name	Total Present Status	From University	Out of	UNIVERSITY ATTAINTMENT APPLICABLE		
							AL:1	AL:2	AL:3
Distribution of Marks				**16**	**100**	**100**	**<40%**	**>=40% & <60%**	**>=60%**
1	A	2001650210001	ADARSH PANDEY	P	71	71	0	0	1
2	A	2001650210002	AKASH GUPTA	P	61	61	0	0	1
3	A	2001650210003	ANJALI VERMA	P	52	52	0	1	0
4	A	2001650210004	GOPAL GUPTA	P	36	36	1	0	0
5	A	2001650210005	HARSH AGNIHOTRI	P	53	53	0	1	0
6	A	2001650210007	RAM BAHADUR SINGH	P	74	74	0	0	1
7	A	2001650210008	RISHABH MISHRA	P	59	59	0	1	0
8	A	2001650210009	SAURABH KUMAR SINGH	P	55	55	0	1	0
9	A	2001650210010	SAURABH YADAV	P	77	77	0	0	1
10	A	2001650210011	SHAIFALI SINGH	P	72	72	0	0	1
11	A	2001650210012	TANUPRIYA PANDEY	P	50	50	0	1	0
12	A	2001650210013	VAIBHAV MISHRA	P	71	71	0	0	1
13	A	2001650210014	VIKRANT SINGH	P	57	57	0	1	0
14	A	2101650219001	AMAAN HASSAN	P	60	60	0	0	1
15	A	2101650219003	MEENAKSHI PRAJAPATI	P	54	54	0	1	0
16	A	2101650219004	ROHIT SAXENA	P	82	82	0	0	1
						Total	**1**	**7**	**8**
						% Student	**6.25**	**43.75**	**50**
						% CO attained	**81.25**		

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for CO Attainment		
Semester: IV	**Name of the Faculty: Mr. SHASHANK SRIVASTAVA**	
Subject Code: KEE-401	**Total No. of Students: 16**	**Subject Name: DIGITAL ELECTRONICS**
CO1	Apply concepts of Digital Binary System and implementation of Gates.	
CO2	Analyze and design of Combinational logic circuits.	
CO3	Analyze and design of Sequential logic circuits with their applications.	
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.	
CO5	Apply the concept of Digital Logic Families with circuit implementation.	

Direct Assessment						
S.No.	**Exam**	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
1	**Internal**	**100**	**100**	**100**	**100**	**100**
Average		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Average % Students Attained Course Outcomes					
S.N.	**Course Outcome**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (Internal)**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (University)**	**TOTAL % STUDENT WHO ATTAINED OUTCOME (Indirect - Survey)**	**Goal**
1	CO1	100.00	81.25	75.00	60
2	CO2	100.00	81.25	75.00	60
3	CO3	100.00	81.25	72.92	60
4	CO4	100.00	81.25	64.58	60
5	CO5	100.00	81.25	66.67	60
Average % Students Attained Course Outcomes		100.00	81.25	70.83	60.00

Weigtage of attainment level	
Direct Assessment	80%
Internal Assessment	60%
University Assessment	40%
Indirect Assessment	20%

% of students attained the outcome					
Assessment Types	**% of students attained CO1**	**% of students attained CO2**	**% of students attained CO3**	**% of students attained CO4**	**% of students attained CO5**
Internal Assessment (I)	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**
University Assessment (U)	**81.25**	**81.25**	**81.25**	**81.25**	**81.25**
Direct Assessment (DI) DI=0.6*I + 0.4* U	**92.50**	**92.50**	**92.50**	**92.50**	**92.50**
Indirect Assessment (ID)	**75.00**	**75.00**	**72.92**	**64.58**	**66.67**
Total = 0.8*DI + 0.2*ID	**89.00**	**89.00**	**88.58**	**86.92**	**87.33**

Attainment Level: Rationale				
EE	**Exceed Expectation**	**Attainment > 5% above the goal**		
ME	**Meet Expectation**	**5% below the goal<=Attainment < 5% above the goal**		
BE	**Below Expectation**	**Attainment <5% below the goal**		
Code	**Description**	**Goal (%)**	**Attainment obtained**	**Attainment Level**
EE	Attainment obtained > 58%	60.00	Attainment value > 63	3
ME	Attainment obtained between 52.% to 58%		57 <= Attainment value > 63	2
BE	Attainment obtained below 52%		Attainment value <57	1

% of students attained the outcome w.r.t attainment level					
Assessment Types	**% of students attained CO1**	**% of students attained CO2**	**% of students attained CO3**	**% of students attained CO4**	**% of students attained CO5**
Internal Assessment (I)	**3**	**3**	**3**	**3**	**3**
University Assessment (U)	**3**	**3**	**3**	**3**	**3**
Direct Assessment (DI) DI=0.6*I + 0.4* U	**3**	**3**	**3**	**3**	**3**
Indirect Assessment (ID)	**3**	**3**	**3**	**3**	**3**
Total = 0.8*DI + 0.2*ID	**3**	**3**	**3**	**3**	**3**

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for Indirect Assesment		
Semester: IV	Name of the Faculty: Mr. SHASHANK SRIVASTAVA	
Subject Code: KEE-401	Total No. of Students: 16	Subject Name: DIGITAL ELECTRONICS

CO1	Apply concepts of Digital Binary System and implementation of Gates.
CO2	Analyze and design of Combinational logic circuits.
CO3	Analyze and design of Sequential logic circuits with their applications.
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.
CO5	Apply the concept of Digital Logic Families with circuit implementation.

Indirect Survay Table		
Options	**Description**	**Value**
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Students feedback Matrix					Total No. of Participants				0
S.No	**Course Outcome**	**Total students participated in feedback**	**No of students in option1 (3)**	**No. of students for option2 (2)**	**No. of students in option3 (1)**	**No. of students in option4 (0)**	**Total Point**	**Total point attained**	**% Attained**
1	**CO1**	16	8	4	4	0	48	36	75.00
2	**CO2**	16	7	6	3	0	48	36	75.00
3	**CO3**	16	7	6	2	1	48	35	72.92
4	**CO4**	16	5	6	4	1	48	31	64.58
5	**CO5**	16	6	5	4	4	48	32	66.67
Average % Students who Attained Course Outcomes									70.83

CO-PO Matrix

S.No.	CO/PO	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**CO1**	A	3	2	2	2	1	-	-	-	-	2	-	2	2	2	2
2	**CO2**	A	2	3	2	2	1	-	-	-	-	2	-	2	2	2	2
3	**CO3**	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
4	**CO4**	A	3	3	3	2	2	-	-	-	-	2	-	2	2	2	2
5	**CO5**	A	3	3	3	2	2					2		2	2	2	2
Average PO			2.8	2.8	2.6	2	1.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2	#DIV/0!	2	2	2	2

Indirect Attainment of CO

S.No.	Exam	STATUS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	**CO1**	A	2.25	1.50	1.50	1.50	0.75					1.50		1.50	1.50	1.50	1.50
2	**CO2**	A	1.50	2.25	1.50	1.50	0.75					1.50		1.50	1.50	1.50	1.50
3	**CO3**	A	2.19	2.19	2.19	1.46	1.46					1.46		1.46	1.46	1.46	1.50
4	**CO4**	A	1.94	1.94	1.94	1.29	1.29					1.29		1.29	1.29	1.29	1.50
5	**CO5**	A	2.00	2.00	2.00	1.33	1.33					1.33		1.33	1.33	1.33	1.50
Average PO			1.98	1.98	1.83	1.42	1.12	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.42	#DIV/0!	1.42	1.42	1.42	1.50

Kanpur Institute of Technology, Kanpur		
Assessment Sheet for PO Attainment		
Semester: IV	Name of the Faculty: Mr. SHASHANK SRIVASTAVA	
Subject Code: KEE-401	Total No. of Students: 16	Subject Name: DIGITAL ELECTRONICS

MAPPING OF COURSE OUTCOME WITH PROGRAM OUTCOMES/PROGRAM SPECIFIC OUTCOME

S.No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	CO1	3.00	2.00	2.00	2.00	1.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
2	CO2	2.00	3.00	2.00	2.00	1.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
3	CO3	3.00	3.00	3.00	2.00	2.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
4	CO4	3.00	3.00	3.00	2.00	2.00	-	-	-	-	2.00	-	2.00	2.00	2.00	2.00
5	CO5	3.00	3.00	3.00	2.00	2.00					2.00		2.00	2.00	2.00	2.00
Average CO		2.80	2.80	2.60	2.00	1.60	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2.00	#DIV/0!	2.00	2.00	2.00	2.00

Direct Assessment (Internal + University)

S.No.	Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	% of students attained CO
1	CO1	2.78	1.85	1.85	1.85	0.93					1.85		1.85	1.85	1.85	1.85	92.50
2	CO2	1.85	2.78	1.85	1.85	0.93					1.85		1.85	1.85	1.85	1.85	92.50
3	CO3	2.78	2.78	2.78	1.85	1.85					1.85		1.85	1.85	1.85	1.85	92.50
4	CO4	2.78	#REF!	2.78	1.85	1.85					1.85		1.85	1.85	1.85	1.85	92.50
5	CO5	2.78	2.78	2.78	1.85	1.85					1.85		1.85	1.85	1.85	1.85	92.50
Average PO		2.59	#REF!	2.41	1.85	1.48					1.85		1.85	1.85	1.85	1.85	92.50

Indirect Attainment of CO

S.No.	Exam	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	% of student Indirect Attained
1	CO1	2.25	1.50	1.50	1.50	0.75					1.50		1.50	1.50	1.50	1.50	75.00
2	CO2	1.50	2.25	1.50	1.50	0.75					1.50		1.50	1.50	1.50	1.50	75.00
3	CO3	2.19	2.19	2.19	1.46	1.46					1.46		1.46	1.46	1.46	1.50	72.92
4	CO4	1.94	1.94	1.94	1.29	1.29					1.29		1.29	1.29	1.29	1.50	64.58
5	CO5	2.00	2.00	2.00	1.33	1.33					1.33		1.33	1.33	1.33	1.50	66.67
Average PO		1.98	1.98	1.83	1.42	1.12					1.42		1.42	1.42	1.42	1.50	70.83

PO Attainment

Attainment	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct(D)	2.59	#REF!	2.41	1.85	1.48					1.85		1.85	1.85	1.85	1.85
Indirect(I)	1.98	1.98	1.83	1.42	1.12					1.42		1.42	1.42	1.42	1.50
Total=.8*D+0.2*I	2.47	#REF!	2.29	1.76	1.41					1.76		1.76	1.76	1.76	1.78

Kanpur Institute of Technology, Kanpur				VALUE
Feedback				
Semester: IV	Name of the Faculty: Mr. SHASHANK SRIVASTAVA			
Subject Code: KEE-401	Total No. of Students: 16		Subject Name: DIGITAL ELECTRONICS	
CO1	Apply concepts of Digital Binary System and implementation of Gates.			To be filled by students
CO2	Analyze and design of Combinational logic circuits.			To be filled by students
CO3	Analyze and design of Sequential logic circuits with their applications.			To be filled by students
CO4	Implement the Design procedure of Synchronous & Asynchronous Sequential Circuits.			To be filled by students
CO5	Apply the concept of Digital Logic Families with circuit implementation.			To be filled by students

Indirect Survay Table		
Options	Description	Value
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Name & Signature of the Student

Kanpur Institute of Technology, Kanpur				VALUE
Feedback				
Semester: IV	Name of the Faculty: Mr. SHASHANK SRIVASTAVA			
Subject Code: KEE-401	Total No. of Students: 16		Subject Name: DIGITAL ELECTRONICS	
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CO5	Apply the concept of Digital Logic Families with circuit implementation.			To be filled by students

Indirect Survay Table		
Options	Description	Value
Option 1	Acquired Very Well with proficiency	3
Option 2	Acquired enough to do my work	2
Option 3	Acquired Marginally	1
Option 4	Did not acquire at all	0

Name & Signature of the Student