

**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY**  
 VIDYA NAGAR, KARUKUTTY, ERNAKULAM - 683 582  
**DEPARTMENT OF MECHANICAL ENGINEERING**

File No: P-27

Index No: P-27

SSET/NBA/ME/P-27

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HOD-ME

Dr. Venu. P  
Head of Department  
Mechanical Engineering

SCMS School of Engineering and Technology, Karukutty

Department of Civil Engineering

CO Matrix for CAY 2015-2019 (KTU)

Semester	Course Code	Course Name	Index	Course Outcomes (CO's)						AVG
				CO1	CO2	CO3	CO4	CO5	CO6	
S1	MA101	Calculus	C101	2.50	2.50	2.67	2.67	2.67		2.60
	PH100	Engineering Physics	C103	0.83	0.99	0.66	0.66	0.50	0.50	0.69
	BE 110	Engineering Graphics	C105	2.00	2.33	2.33	2.33	2.33	2.33	2.28
	BE101-01	Introduction to Civil Engineering	C107	3.00	2.67	2.34	2.34	2.51	3.00	2.64
	BE103	Introduction to Sustainable Engineering	C109	2.51	2.34	2.51	2.51	2.67	2.51	2.51
	ME110	Basic Mechanical Workshop	C111	3.00	3.00	3.00	3.00	3.00		3.00
	PH110	Engineering Physics Lab	C113	3.00	3.00	3.00	3.00			3.00
	CE110	Basic Civil Workshop	C115	3.00	3.00	3.00				3.00
	ME110	Basic Mechanical Workshop	C117	3.00	3.00	3.00	3.00	3.00		3.00
S2	MA102	Differential Equations	C102	2.34	2.34	2.17	2.67			2.38
	CY100	Engineering Chemistry	C104	3.00	3.00	2.67	2.67	3.00	3.00	2.89
	BE100	Engineering Mechanics	C106	2.17	2.17	1.51	1.51	2.33	2.33	2.00
	BE102	Design & Engineering	C108	3.00	2.80	3.00	2.60			
	EC100	Basics of Electronics Engineering	C110	1.50	1.66	1.50	1.50	1.66	1.66	1.58
	EE100	Basics of Electrical Engineering	C112	2.34	2.01	2.34	2.34	2.34	2.50	2.31
	CY110	Engineering Chemistry Lab	C114	3.00	3.00	3.00				3.00
	EC110	Basic Electronics Workshop	C116	2.20	2.20	2.20				2.20
	EE110	Basic Electrical Workshop	C118	3.00	3.00	3.00	3.00			3.00
S3	MA201	Linear Algebra & Complex Analysis	C118	1.50	1.00	1.00	1.33			1.21
	CE201	Mechanics of Solids	C119	0.83	0.50	1.00	0.83	1.33	1.33	0.97
	CE203	Fluid Mechanics- I	C120	0.99	0.99	0.99	0.66	0.66	0.99	0.88
	CE205	Engineering Geology	C121	1.50	1.00	1.66	1.66	1.33	1.17	1.39
	CE207	Surveying	C122	1.00	1.00	1.66	1.66	1.00	1.66	1.33
	HS210	Life Skills	C123	3.00	3.00	3.00	3.00	3.00	2.01	2.84
	CE231	Civil Engineering Drafting Lab	C124	3.00	2.80	2.80				2.87
	CE233	Surveying Lab	C125	3.00	3.00	2.80				2.93
	MA202	Probability Distributions, Transforms and Numerical Methods	C126	1.83	1.34	1.34	2.00			1.62
S4	CE202	Structural Analysis- I	C127	0.50	0.34	0.67	0.34	1.33	1.33	0.75
	CE204	Construction Technology	C128	1.66	1.33	1.66	1.66	1.50	1.33	1.52
	CE206	Fluid Mechanics- II	C129	0.67	1.00	0.83	0.67	1.00	0.67	0.80
	CE208	Geotechnical Engineering- I	C130	2.67	2.50	2.67	2.34	2.67	2.67	2.58
	HS200	Business Economics	C131	3.00	3.00	2.84	2.67	3.00		2.90
	CE232	Materials Testing Lab I	C132	3.00	3.00	3.00				3.00
	CE234	Fluid Mechanics Lab	C133	3.00	3.00	3.00				3.00
										3.00



S5	CE301	Design of Concrete Structures I	C134	1.33	0.84	0.84	1.33	0.67		1.00
	CE303	Structural Analysis- II	C135	2.33	2.33	2.17	1.67	1.34	1.34	1.86
	CE305	Geotechnical Engineering- II	C136	3.00	2.84	3.00	3.00	3.00	3.00	2.97
	CE307	Geomatics	C137	1.17	1.00	1.50	1.33	1.33	1.33	1.28
	CE309	Water Resources Engineering	C138	1.67	1.50	1.50	1.34	1.34	2.00	1.56
	CE361	Advanced Concrete Technology	C139	1.17	1.00	1.50	1.33	1.33	1.50	1.30
	CE331	Materials Testing Lab II	C140	2.80	3.00	3.00	2.80			2.90
	CE333	Geotechnical Engineering Lab	C141	3.00	3.00	3.00				3.00
	CE341	Design Project	C142	2.00	2.33	2.00	1.34	1.34	1.34	1.73
	CE302	Design of Hydraulic Structures	C143	1.67	1.50	2.00	2.00	2.00		1.83
S6	CE304	Design of Concrete Structures II	C144	0.33	0.33	0.33	0.33	0.99	0.83	0.52
	CE306	Computer Programming and Computational Techniques	C145	1.50	1.50	1.67	1.83	1.83		1.67
	CE308	Transportation Engineering- I	C146	2.00	1.83	2.00	2.00	2.00	2.00	1.97
	HS300	Principles of Management	C147	2.34	2.67	2.34	2.67	2.67		2.53
	CE366	Traffic Engineering and Management	C148	2.67	3.00	2.84	2.67	2.67	2.67	2.75
	CE374	Air Quality Management	C149	1.33	1.17	1.66	1.66	1.66	1.66	1.52
	CE332	Transportation Engineering Lab	C150	3.00	3.00	3.00				3.00
	CE334	Computer Aided Civil Engineering Lab	C151	2.60	2.60	2.50				2.57
	CE352	Comprehensive Exam	C152	2.75	2.75					2.75
	CE401	Design of Steel Structures	C153	2.00	2.00	2.00	2.17	2.00		2.03
S7	CE403	Structural Analysis- III	C154	2.50	2.50	2.67	2.34	2.34	2.17	2.42
	CE405	Environmental Engineering- I	C155	2.84	2.84	2.84	3.00	2.67	2.67	2.81
	CE407	Transportation Engineering -II	C156	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	CE409	Quantity Surveying and Valuation	C157	2.34	2.67	2.50	2.67	2.34	2.67	2.53
	CE467	Highway Pavement Design	C158	2.67	2.67	3.00	2.67	3.00	3.00	2.84
	CE469	Environmental Impact Assessment	C159	2.51	2.84	3.00	3.00	3.00	2.84	2.86
	CE451	Seminar & Project Preliminary	C160	1.33	1.00					1.17
	CE431	Environmental Engineering Lab	C161	3.00	3.00	3.00				3.00
	CE402	Environmental Engineering II	C162	1.50	1.34	1.34	1.50	1.83	1.67	1.53
S8	CE404	Civil Engineering Project Management	C163	2.00	1.84	1.84	1.67	1.67	1.67	1.78
	CE462	Town and Country Planning	C164	1.66	1.17	1.00	1.66	0.67	0.67	1.14
	ME482	Energy Conservation and Management	C165	3.00	2.67	2.67	3.00	2.34	2.84	2.75
	CE492	Project	C166	3.00	3.00	2.84				2.95

*Dr. J. K. Singh*  
HOD - CE



**SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY  
VIDYA NAGAR, KARUKUTTY, ERNAKULAM  
DEPARTEMENT OF COMPUTER SCIENCE AND ENGINEERING  
CO ASSESSMENT TOOL**

**Course Code & Name** : CS204 OPERATING SYSTEMS  
**Faculty** : LITTY KOSHY.  
**Academic Year** : 2018-19  
**Class** : S7-CSE-II  
**Regulation** : R-2015

**COURSE OUTCOMES –CS204 OPERATING SYSTEMS**

After the completion of this course, students should be able to

CS204.1	Identify the significance of operating system in different environments
CS204.2	Exemplify the communication between application programs and hardware devices through system calls and also summarize the concept of process management
CS204.3	Compare and illustrate various process scheduling algorithms and process synchronization mechanisms.
CS204.4	Apply appropriate memory and file management schemes.
CS204.5	Illustrate various disk scheduling algorithms.
CS204.6	Appreciate the need of access control and protection in an operating system.

**Mapping of Assessment tools with COs**

Assessment Tools	CO1	CO2	CO3	CO4	CO5	CO6
IAT	X	X	X	X	X	X
Class Test	X	X			X	X
Assignment		X	X	X	X	X

**Weightage for Assessment tools**

Course Outcomes	IAT	Class Test	Assignment
CS204.1	80	20	
CS204.2	70	10	20
CS204.3	90		10
CS204.4	90		10
CS204.5	60	20	10
CS204.6	10	70	20

*Litty Koshy*  
Faculty

**SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY, KARUKUTTY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**COURSE EXIT FEEDBACK-OPERATING SYSTEMS**

Question	Responses					Sum 5+4
	5.To a very great extent	4.To a great extent	3.To a moderate extent	2.To some extent	1.Not at all	
S204.1 I am able to Identify the significance of operating system in different environments						67.39
	14	17	15	0	0	
	30.43	36.96	32.61	0.00	0.00	
S204.2 I am able to simplify the communication between application programs and hardware devices through system calls.						65.22
	18	12	12	4	0	
	39.13	26.09	26.09	8.70	0.00	
S204.3 I am able to compare and illustrate various process scheduling algorithms.						65.22
	10	20	14	2	0	
	21.74	43.48	30.43	4.35	0.00	
S204.4 I am able to Apply appropriate memory and file management schemes.						63.04
	4	25	10	7	0	
	8.70	54.35	21.74	15.22	0.00	
S204.5 I am able to illustrate various disk scheduling algorithms.						71.74
	13	20	9	3	1	
	28.26	43.48	19.57	6.52	2.17	
S204.6 I am able to examine the need of access control and protection in an operating system.						78.26
	21	15	6	4	0	
	45.65	32.61	13.04	8.70	0.00	



SCHOOL OF ENGINEERING & TECHNOLOGY, KARAKULIT  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
ASSESSMENT OF ATTAINMENT OF COURSE OUTCOMES

Code & Name : CS204 OPERATING SYSTEM  
LITTY KOSHY  
Semester : 2018-2019  
S4 CS2 2018  
Year : 2018

On the completion of this course, students should be able to

1. Identify the significance of operating system in different environments
2. Exemplify the communication between application programs and hardware devices through system calls and also summarize the concept of process management.
3. Compare and illustrate various process scheduling algorithms and process synchronization mechanisms.
4. Apply appropriate memory and file management schemes.
5. Illustrate various disk scheduling algorithms.
6. Appreciate the need of access control and protection in an operating system.

REG. NO	NAME	Course Outcomes																								University exam
		CS204.1			CS204.2			CS204.3			CS204.4			CS204.5			CS204.6									
		PO1	PO2		PO1	PO2	PO2	PO1	PO1	PO2	PO3		PO2		PO1		PO1	PO10		PO1	PO2	PO10				
		80	20	100	70	10	20	100	10	70	10	10	100	80	10	10	100	60	20	20	100	10	20	70	100	
IATI	CT	TOTAL	IATI	CT	ASSIGNMENT	TOTAL	IATI	IAT2	IAT3	ASSIGNMENT	TOTAL	IAT2	IAT3	ASSIGNMENT	TOTAL	IAT3	CT	ASSIGNMENT	TOTAL	IAT3	ASSIGNMENT	CT	TOTAL	University Grade		
SCM17CS056	MANEESH KRISHNA M	51	16.8	67	61	8	16	85	9	65	5	10	89	63	5	10	79	39	18	20	77	7	20	51	78	B+
SCM17CS057	MANOJA E	71	16.4	87	65	9	20	94	10	80	3	5	98	80	5	8	93	35	20	18	73	7	20	64	90	B+
SCM17CS058	MARIYA RAPHEL	61	17.6	79	65	10	20	95	10	59	9	10	88	72	5	10	86	46	20	20	86	7	20	59	85	B
SCM17CS059	MEERA C ANIL	44	16	60	23	10	16	49	6	0	9	10	25	68	5	10	82	39	18	20	77	7	20	34	61	C
SCM17CS060	MILNA JAMES	71	17.6	88	65	10	16	91	9	80	5	5	99	65	7	10	81	28	18	20	66	7	20	63	90	B
SCM17CS061	A	35	15.2	50	26	9	16	51	10	40	0	10	60	40	0	10	50	0	18	20	38	0	20	33	53	F
SCM17CS062	V	0	14.4	14	0	9	0	9	0	29	8	6	42	18	4	10	32	49	15	20	84	10	20	45	75	C
SCM17CS063	NEAL A VINOD	57	15.2	73	33	10	20	63	10	53	8	10	81	37	5	10	53	35	20	20	75	3	20	47	70	F
SCM17CS064	NEETHU SUNIL	53	16	69	47	10	16	73	10	78	0	10	98	61	5	10	76	46	18	20	84	7	20	49	76	B+
SCM17CS065	NIMISHA MANOJ	0	9	9	0	9	20	29	0	63	8	4	75	79	5	10	93	32	20	20	72	7	20	49	76	F
SCM17CS066	NIVEDYA K P	51	10	61	28	6	16	50	2	65	8	10	85	63	10	10	83	60	18	20	98	10	20	42	72	C
SCM17CS067	PARVATHI P J	45	15.2	61	51	10	16	77	10	76	3	10	99	63	3	10	76	25	18	20	63	10	20	46	76	B+
SCM17CS068	POOJA S	72	16	88	63	9	16	88	10	76	3	10	99	72	6	10	88	53	16	20	89	7	20	64	90	B+
SCM17CS069	PREMKRISHNA SUJIT	44	19	63	16	9	16	41	5	25	5	10	45	41	4	10	56	35	18	20	73	10	20	32	62	F
SCM17CS070	RAHUL K R	32	10	42	28	10	16	54	0	46	3	10	58	48	1	10	59	18	17	20	55	2	20	25	47	F
SCM17CS071	RAMACHANDRAN T H	33	10	43	12	6	0	18	1	30	0	7	38	28	3	10	41	56	8	20	84	0	20	22	42	F
SCM17CS072	RITHVIK S MENON	33	15.2	49	51	8	12	71	5	48	0	10	63	50	0	10	60	0	16	20	36	0	20	36	56	F
SCM17CS073	RIZWANA YASMIN HASHIM	69	16.8	86	65	9	16	90	10	76	3	10	99	69	5	10	84	18	18	20	56	7	20	63	90	B
SCM17CS074	ROBIN ABRAHAM	43	19	62	14	10	16	40	4	34	9	10	57	29	5	10	44	46	18	20	84	7	20	29	56	F
SCM17CS075	ROHAN J THEVARA	0	15.2	15	0	8	16	24	0	46	8	10	64	63	7	10	80	28	17	20	65	10	20	42	72	C
SCM17CS077	ROSEMOL BIJU	55	16	71	35	10	0	45	5	76	8	6	95	77	10	10	97	46	18	20	84	10	20	43	73	B+
SCM17CS078	ROSHAN PRASAD	39	22	61	49	8	12	69	6	50	9	10	74	63	7	10	80	39	16	20	75	7	20	39	66	C
SCM17CS079	SAEED V BASHEER	21	16.8	38	23	9	16	48	4	29	7	10	49	65	3	10	77	42	18	20	80	10	20	21	51	B
SCM17CS080	SANJU M P	73	20	93	56	10	20	86	10	72	7	10	99	80	7	10	97	42	20	20	82	7	20	62	89	A
SCM17CS081	SARANYA M NAMBIAR	44	18.4	62	47	9	20	76	5	63	7	10	85	54	9	10	73	53	20	20	93	10	20	41	71	B
SCM17CS082	SARATH A	35	16.8	51	19	8	16	43	0	57	8	13	78	58	5	10	73	35	18	20	73	10	20	35	65	B
SCM17CS083	SARATH AMAY NAIR	43	15.2	58	28	6	0	34	5	42	9	6	61	43	8	10	61	48	17	20	85	10	20	34	64	B
SCM17CS084	SARATH J	29	14.4	44	23	10	20	53	10	34	7	10	61	77	5	10	93	14	20	20	54	3	20	29	53	B+
SCM17CS085	ELDHO	71	19.2	90	65	6	16	87	10	63	9	10	92	69	7	10	86	44	18	20	82	10	20	64	94	A
SCM17CS086	SHILPA SEKHAR	63	14.8	77	63	9	20	92	6	67	7	10	90	68	7	10	84	39	20	20	79	13	20	56	89	B+
SCM17CS087	SHIMIL K ELDOSE	75	19.2	94	63	8	0	71	8	50	9	0	67	62	7	10	79	62	18	20	100	10	20	64	94	B+
SCM17CS088	SHRAVAN MANOJ	72	18.4	90	37	10	16	63	10	59	9	10	88	72	6	10	88	60	18	20	98	3	20	56	79	B+
SCM17CS089	SIMON SAJU	51	15.2	66	65	9	16	90	10	69	8	10	97	66	0	10	76	18	17	20	55	7	20	53	80	B+
SCM17CS090	SNEHA S NAMBIAR	41	19	60	51	9	0	60	5	69	6	6	86	28	7	10	44	35	16	20	71	7	20	41	67	F
SCM17CS091	SOHAN JAMES	21	12	33	28	9	16	53	0	32	8	10	50	63	7	10	80	46	17	20	83	7	20	20	46	C
SCM17CS093	SREERAJ B R	39	21	60	33	9	16	58	5	42	7	10	64	43	7	10	59	42	18	20	80	7	20	32	58	C
SCM17CS094	STEN BENNY	24	14.4	38	9	9	20	38	9	57	9	4	79	58	8	10	76	49	20	20	89	7	20	22	48	C
SCM17CS095	SUMAYYA SUHAIL	41	19	60	42	10	16	68	10	72	9	8	99	58	0	10	68	46	18	20	84	10	20	41	71	B
SCM17CS096	SWATHY HARISH	56	16.8	73	56	8	16	80	6	76	6	10	98	52	4	10	66	60	18	20	98	3	20	50	74	B
SCM17CS097	THOMAS VILANGADAN	16	17.6	34	9	7	16	32	0	46	9	10	64	58	8	10	76	60	18	20	98	7	20	49	76	F
SCM17CS098	VARUN S NAIR	69	17.6	87	70	8	0	78	5	76	5	6	92	80	3	10	93	14	19	20	53	3	20	61	84	A
SCM17CS099	VIKHNESH KRISHNA	29	12.8	42	0	8	16	24	0	55	7	10	72	25	7	0	31	21	16	20	57	7	20	41	67	F
SCM17CS100	VINAY ARUN DEO	29	12.8	42	47	10	16	73	4	46	0	10	60	18	7	10	35	42	17	20	79	10	20	32	62	C
SCM17CS101	VINAY STEEPHEN	43	19.2	62	47	9	12	68	5	4	9	10	27	11	8	10	29	35	16	20	71	10	20	40	70	C
SCM17CS102	VINIL VARGHESE	17	11.2	29	26	8	16	50	2	36	0	10	48	48	0	10	58	0	17	20	37	0	20	49	69	F
SCM17CS103	VISHNU GOPIDAS	49	12	61	51	8	16	75	5	51	8	10	74	44	8	10	62	44	18	20	82	10	20	45	75	C



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Projected CO - PO Attainment

Name of Faculty:	LITTY KOSHY														
Course Code:	CS204														
Course Name:	OPERATING SYSTEMS														
Class & Semester	: S4 CS2 2018										Batch Year : BATCH 2017 -2021				
PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO															
CS204.1	3		2										2		
CS204.2	2		2											1	2
CS204.3	1		2										2	1	
CS204.4	3		2										3		
CS204.5	2	2												2	
CS204.6	3		2											1	2
Average CO of each PO	2.33	2.00	2.00										2.33	1.25	2
PO Direct Attainment FOR AY 2018 to 2019													PSO Direct Attainment		
PO & PSO Attainment(CO with 20-80)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PO & PSO Attainment(CO with 33-67)	0.39	0.33	0.33										0.39	0.21	0.33
PO - Indirect Attainment													PSO Indirect Attainment		
PO & PSO Indirect Attainment	1.04	0.89	0.89										1.04	0.56	0.89

Ddirect(Avg)	0.39
Indirect(Avg)	1.04
PO attainment=	0.5154

Course Outcomes	DIRECT ATTAINMENT		INDIRECT ATTAINMENT
	CO Attainment Level	CO Attainment Level	CO Attainment Level
	Internal Assessment	University Exam	Course Exit Survey
CS204.1	1	No entries	1
CS204.2	0		1
CS204.3	2		1
CS204.4	1		1
CS204.5	3		2
CS204.6	2		2
<b>Average</b>	<b>1.50</b>	<b>0</b>	<b>1.33</b>
Weightage 33 for Internal and Weightage 67 for external			
<b>Attainment of CO for CS204</b>		<b>0.50</b>	

**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**ASSESSMENT TOOL DESCRIPTION**

**CLASS** : S4CS1  
**COURSE NAME** : CS232 - FREE AND OPEN SOURCE SOFTWARE LAB  
**FACULTY INCHARGE:** Ms SINDHYA K NAMBIAR  
**ACADEMIC YEAR** : 2018-19

Course Outcomes	Course Outcome Description	Assessment Tool(s)
cs232.1	Identify and apply various Linux commands	Ex.No 1,2,3,9
		Viva voce
cs232.2	Develop shell scripts and GUI for specific needs.	Ex.No 4,5,6,7,8,10,11,12
		viva voce
cs232.3	Perform simple text processing using awk and perl programming and familiarize e tools like GIT.	EX.NO 13,15
		viva voce
cs232.4	Perform basic level application deployment, kernel configuration and installation, packet management and installation etc.	EX.NO 14
		viva voce

  
**FACULTY**



**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**ASSESSMENT OF ATTAINMENT OF COURSE OUTCOMES**

Course Code & Name : CS232- FOSS LAB  
 Faculty : Ms. Sindhya K Nambiar  
 Academic Year : 2018 - 2019  
 Class : S4 CS1 BATCH: 2017-21  
 Regulation : 2016

After the completion of this course, students should be able to

CS232.1	Identify and apply various Linux commands
CS232.2	Develop shell scripts and GUI for specific needs.
CS232.3	Perform simple text processing using awk and perl programming and familiarize e tools like GIT.
CS232.4	Perform basic level application deployment, kernel configuration and installation, packet management and installation etc.

Course Outcomes				CS232.1			CS232.2			CS232.3			CS232.4			University exam
				90	10	100	90	10	100	90	10	100	90	10	100	100
Sl. No.	Class No	REG. NO	NAME	Ex.No 1,2,3,9	Viva voce	TOTAL	Ex.No 4,5,6,7,8,10,11,	viva voce	TOTAL	EX.NO 13,15	viva voce	TOTAL	EX.NO 14	viva voce	TOTAL	University Grade
1	24	SCM17CS026	ARJUN SUBRAMANIAN	78	10	88	79	10	89	90	10	100	68	10	78	O
2	11	SCM17CS011	AKSHARA K R	76	3	79	76	3	79	90	3	93	68	3	70	B
3	18	SCM17CS019	ANJAL DAS T P	79	1	81	84	1	86	79	1	80	68	1	69	C



**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**ASSESSMENT OF ATTAINMENT OF COURSE OUTCOMES**

**Course Code & Name** : CS232 - FREE AND OPEN SOURCE SOFTWARE LAB  
**Faculty** : Ms. Sindhya K Nambiar  
**Academic Year** : 2018 - 2019  
**Class** : S4 CS1 BATCH: 2017-21  
**Regulation** : 2016

After the completion of this course, students should be able to

CS232.1	Identify and apply various Linux commands
CS232.2	Develop shell scripts and GUI for specific needs.
CS232.3	Perform simple text processing using awk and perl programming and familiarize e tools like GIT.
CS232.4	Perform basic level application deployment, kernel configuration and installation, packet management and installation etc.

Course Outcomes			CS232.1				CS232.2			CS232.3			CS232.4			University exam
			90	10	100	90	10	100	90	10	100	90	10	100	100	
S.NO	REG. NO	NAME	Ex.No 1,2,3,9	Viva voce	TOTAL	Ex.No 4,5,6,7,8,10,11,12	viva voce	TOTAL	EX.NO 13,15	viva voce	TOTAL	EX.NO 14	viva voce	TOTAL	University Grade	
1	SCM17CS001	AAROMAL SUJITH	81	7	88	84	7	92	90	7	97	68	7	75	A	
2	SCM17CS002	ABHIJITH CHACKO	68	3	71	68	3	71	90	3	93	68	3	71	B	
3	SCM17CS003	ABHIJITH VIJAYAN	78	8	86	79	8	87	90	8	98	68	8	76	O	
4	SCM17CS004	AGNEY SAIDAS	73	5	77	73	5	78	90	5	95	68	5	72	B+	
5	SCM17CS005	AHALYA BAIJU P	78	3	81	79	3	82	90	3	93	68	3	71	B	
6	SCM17CS006	AJAY S	71	5	76	70	5	75	90	5	95	68	5	72	B+	
7	SCM17CS007	AJIL JAISON	78	7	84	79	7	85	90	7	97	68	7	74	A+	

Set 2  
1. Perform the following using linux commands  
a. List all files including hidden files.



8	SCM17CS008	AJSER JUMANUDHEEN K T P	81	4	85	82	4	86	90	4	94	68	4	72	A+
9	SCM17CS009	AKASH K P	69	4	73	70	4	74	90	4	94	68	4	72	A
10	SCM17CS010	AKHIL PAUL	81	7	88	82	7	88	90	7	97	68	7	74	B+
11	SCM17CS011	AKSHARA K R	76	3	79	76	3	79	90	3	93	68	3	70	B
12	SCM17CS013	ALEN T BABURAJ	69	2	71	65	2	67	90	2	92	68	2	70	B
13	SCM17CS014	ALVIN JOSE	71	3	74	70	3	74	79	3	82	68	3	71	B+
14	SCM17CS015	AMEENA AZAD	62	4	66	65	4	69	90	4	94	68	4	72	B
15	SCM17CS016	ANAGHA K J	81	6	87	84	6	90	90	6	96	68	6	74	A+
16	SCM17CS017	ANANDARAM S	71	9	80	70	9	79	90	9	99	68	9	76	B+
17	SCM17CS018	ANIRUDH SASI	81	8	89	82	8	90	90	8	98	68	8	76	A+
18	SCM17CS019	ANJAL DAS T P	79	1	81	84	1	86	79	1	80	68	1	69	C
19	SCM17CS020	ANJALI K P	79	8	87	84	8	92	90	8	98	68	8	76	A
20	SCM17CS022	ANUPA T SEBASTIAN	81	7	88	84	7	91	90	7	97	68	7	74	A
21	SCM17CS023	ANZU MERIN JOHN	81	5	86	84	5	90	90	5	95	68	5	73	B
22	SCM17CS024	APARNA	83	8	91	84	8	92	90	8	98	68	8	76	A+
23	SCM17CS025	ARDRA NAIR	81	3	84	84	3	88	90	3	93	68	3	71	B+
24	SCM17CS026	ARJUN SUBRAMANIAN	84	10	94	84	10	94	90	10	100	68	10	78	O
25	SCM17CS027	ARJUN SURESH	83	7	90	79	7	86	90	7	97	68	7	75	A+
26	SCM17CS028	ARSHIK ANTONY	81	7	88	79	7	86	90	7	97	68	7	75	O
27	SCM17CS029	ARUNDHATHI A	84	7	91	84	7	91	90	7	97	68	7	74	O
28	SCM17CS030	ASHAL M JOSHY	71	3	74	73	3	76	90	3	93	68	3	71	B+
29	SCM17CS031	ASHBY BABU	73	9	81	73	9	82	90	9	99	68	9	76	A+
30	SCM17CS032	ASHIK MATHEW	84	7	92	84	7	92	90	7	97	68	7	75	O
31	SCM17CS033	ASHIL BASHEER	74	9	83	76	9	85	90	9	99	68	9	76	B+
32	SCM17CS034	ASWIN ANAND S	74	7	82	74	7	82	90	7	97	68	7	75	A+
33	SCM17CS035	ASWIN RAJEEV	51	3	53	51	3	53	90	3	93	68	3	70	C
34	SCM17CS036	ASWIN REMESH	57	5	63	62	5	67	90	5	95	68	5	73	B
35	SCM17CS037	DEVIKA CHANDRAN	73	9	81	76	9	85	90	9	99	68	9	76	A
36	SCM17CS038	DHEESHNA M D	74	5	80	73	5	78	90	5	95	68	5	73	B+
37	SCM17CS039	DIVYA SABU	71	5	76	79	5	84	90	5	95	68	5	73	O
38	SCM17CS040	FARZANA V M	66	5	71	68	5	73	90	5	95	68	5	73	B+
39	SCM17CS041	GAYATHRI V	81	6	87	82	6	88	90	6	96	68	6	74	A
40	SCM17CS042	HARIHARAN V	83	8	91	84	8	92	90	8	98	68	8	76	O
41	SCM17CS043	HIDA RAHMAN	69	5	74	73	5	78	90	5	95	68	5	72	B+



42	SCM17CS044	HISANA T Y	79	8	87	84	8	92	90	8	98	68	8	76	O
43	SCM17CS045	IJAZ BABU M	74	7	81	68	7	74	90	7	97	68	7	74	A+
44	SCM17CS046	JISO JOSE	83	6	89	84	6	90	90	6	96	68	6	74	A
45	SCM17CS047	JITHIN GEORGE NETTICADAN	84	7	92	84	7	92	90	7	97	68	7	75	O
46	SCM17CS048	JITHIN JOSEPH MICHAEL	74	7	82	79	7	86	90	7	97	68	7	75	A
47	SCM17CS049	JIYA BENNY	83	6	89	84	6	90	90	6	96	68	6	74	O
48	SCM17CS050	JOEL MATHEW PAUL	84	9	93	84	9	93	90	9	99	68	9	76	O
49	SCM17CS051	JYOTHISH A	81	9	90	84	9	94	90	9	99	68	9	77	O
50	SCM17CS052	KAVITHA K K	83	7	90	84	7	92	90	7	97	68	7	75	O
51	SCM17CS053	KORANKOTTE MANOJ ADITYA	34	6	40	34	6	40	79	6	85	68	6	74	C
52	SCM17CS054	KRISHNANATH K	76	5	81	76	5	81	90	5	95	68	5	73	B+
53	SCM17CS055	MALAVIKA K NAIR	83	4	87	84	4	88	90	4	94	68	4	72	O
No of Students scored set attainment level			51	31	51	51	31	51	53	31	53	53	31	53	50
% of Students scored set attainment level			96	58	96	96	58	96	100	58	100	100	58	100	94
Level of Attainment			3	0	3	3	0	3	3	0	3	3	0	3	3

Course Outcomes	Attainment Level
	Internal Assessment
CS232.1	3
CS232.2	3
CS232.3	3
CS232.4	3
	3.00

Method	Weightage
Internal	20
University	80

Attainment of CO for cs232	3.00
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13. STOP  
 11. Ex print F grade - 9 (to hold 7.50)  
 12. Ex print F grade



**SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**COURSE WISE - PO AND PSO ATTAINMENT**

Name of Faculty: SINDHYA K NAMBIAR													AY 2018 - 2019			<b>INDIRECT ATTAINMENT</b>	
Course Code: CS232													SEM :4				
Course Name: FREE AND OPEN SOURCE SOFTWARE LAB													CLASS : S4 CS1			<b>CO Attainment Level</b>	
PO																	<b>Course Exit Survey</b>
CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3		
CS232.1	3	2	2	1	1								2	2		3	
CS232.2	2	2	2										1	3		3	
CS232.3	2	1	2		2								1	2		3	
CS232.4	2	1		1	3	2							1	3	1	3	
<b>Average</b>	2.25	1.5	2	1	2	2							1.25	2.5	1.00	<b>3.00</b>	

**Actual CO - PO Attainment for the Final CO attained Value of**

<b>PO Attainment</b>	2.25	1.50	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	2.50	1.00
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**PO - Indirect Attainment**

**PSO Indirect  
Attainment**

<b>PO &amp; PSO Indirect Attainment</b>	2.25	1.50	2.00	1.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	2.50	1.00
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SCMS School of Engineering and Technology, Karukutty  
Department of Civil Engineering

Record of PO/PSO Target Level Batch 2015-2019 - KTU

Semester	Course Code	Course Code	Course Name	PO-PSO Target																		
				PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3				
S1	C101	MA101	Calculus	3.00	3.00		1.00									1.00	2.00					
	C103	PH100	Engineering Physics	2.00	2.00												1.00					
	C105	BE 110	Engineering Graphics	2.00					1.00									1.00				
	C107	BE101-01	Introduction to Civil Engineering	2.00	1.83					2.80				3.00					3.00			
	C109	BE103	Introduction to Sustainable	1.33						2.00	2.83	1.50					2.00	1.33	1.67	1.00		
	C111	ME100	Basics of Mechanical	3.00	2.00													1.00				
	C113	PH110	Engineering Physics Lab	3.00				1.00											1.00			
	C115	CE110	Basic Civil Workshop	2.33															1.00			
	C117	ME110	Basic Mechanical Workshop	2.60	2.00														2.00			
S2	C102	MA102	Differential Equations	3.00	2.00		1.00	1.00								1.00	2.00					
	C104	CY100	Engineering Chemistry	3.00	3.00														1.00			
	C106	BE100	Engineering Mechanics	2.83	2.16														1.00			
	C108	BE102	Design and engineering	1.50	1.00	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00				1.83	1.75	2.00	
	C110	EC100	Basics of Electronics	1.83	1.00										2.00				1.00	1.00	1.00	
	C112	EE100	Basics of Electrical Engineering	1.83	1.00	1.50			1.00	1.00	1.33									1.00		
	C114	CY110	Engineering Chemistry Lab	3.00	3.00	1.00	2.00													2.33		
	C116	EC110	Basic Electronics Workshop	2.00																3.00		
	C118	EE110	Basic Electrical Workshop		3.00														1.00	1.00		
S3	C201	MA201	Linear Algebra & Complex	2.50	2.50	3.00													1.75	2.00		
	C203	CE201	Mechanics of Solids	3.00	2.20	1.00														2.00		
	C205	CE203	Fluid Mechanics- I	2.67	1.67															3.00		
	C207	CE205	Engineering Geology	3.00	2.25	1.00														2.00		
	C209	CE207	Surveying	2.20	2.50		2.33	2.67												2.20	2.25	
	C211	HS210	Life Skills				1.00			1.00	1.00	2.00	3.00								1.00	
	C213	CE231	Civil Engineering Drafting Lab	2.00		3.00			3.00	3.00										1.00		
	C215	CE233	Surveying Lab	3.00	1.00				3.00											3.00	2.00	2.00
	C202	MA202	Probability Distributions,	2.50	2.50	2.00	2.00			3.00	3.00									3.00	2.00	2.00
S4	C204	CE202	Structural Analysis- I	1.00	3.00															2.50	1.00	
	C206	CE204	Construction Technology	2.00		1.50			2.00	1.00										2.00		
	C208	CE206	Fluid Mechanics- II	3.00	2.17															3.00	2.00	
	C210	CE208	Geotechnical Engineering- I	2.17	2.40	2.00														1.67		
	C212	HS200	Business Economics																			1.40
	C214	CE232	Materials Testing Lab I	2.00	2.00		2.00													2.67		
	C216	CE234	Fluid Mechanics Lab	3.00	2.00															2.50	2.50	2.00

*Shilpa*



S5	C301	CE301	Design of Concrete Structures I	3.00	2.00	1.00			1.00					1.00			3.00	1.00	1.00
	C303	CE303	Structural Analysis- II	1.83	2.67												2.17	1.60	1.00
	C305	CE305	Geotechnical Engineering- II	2.00	2.60	3.00	2.00										1.67		
	C307	CE307	Geomatics	1.17	1.00	2.00			1.00								1.17		
	C309	CE309	Water Resources Engineering	3.00	2.00	2.00		1.00									2.50	2.00	
	C311	CE371	Environment and Pollution	2.60	2.33				3.00								2.33	1.67	2.67
	C313	CE361	Advanced Concrete Technology	1.67	2.00	2.00		1.00	1.00	1.00	1.00	2.00	1.33	2.00	1.00	1.00	1.00	1.00	
	C315	CE331	Materials Testing Lab II	2.50	2.00		1.50					3.00	2.00				2.25		
	C317	CE333	Geotechnical Engineering Lab	2.00			1.67					2.00	2.00				2.66	1.00	
	C319	CE341	Design Project	2.00	2.00	3.00	2.00		2.00			2.00	2.00				1.67	1.00	1.67
S6	C302	CE302	Design of Hydraulic Structures	2.00	1.50	2.30											2.40	1.00	
	C304	CE304	Design of Concrete Structures II	3.00	3.00	3.00			3.00		1.00	1.00	1.00				2.60	1.67	1.00
	C306	CE306	Computer Programming and	2.00	2.00	3.00	2.00	2.00								1.00	2.75	1.00	2.00
	C308	CE308	Transportation Engineering- I	2.00		2.33	1.50										1.71		
	C310	HS300	Principles of Management	1.60	1.00				2.00		2.00	1.50	2.00	1.00			1.00		
	C312	CE362	Ground Improvement Techniques	1.83	1.00	2.00		1.00		1.00				1.00		1.83	2.00		
	C314	CE366	Traffic Engineering and	1.33	1.80	2.00											1.17		
	C316	CE374	Air Quality Management	1.20	2.00				2.00	2.00							2.00		
	C318	CE332	Transportation Engineering Lab	2.00			1.67					3.00	2.00		1.00		3.00		
	C320	CE334	Computer Aided Civil	1.33				3.00				2.00			1.00	1.50	1.00	3.00	
C322	CE352	Comprehensive Exam	3.00	1.00								1.00			1.00	1.00			
S7	C401	CE401	Design of Steel Structures	3.00	2.00	2.67			3.00		2.00		2.00				3.00	2.00	1.00
	C403	CE403	Structural Analysis- III	2.83	2.83	2.00											2.50	1.75	1.00
	C405	CE405	Environmental Engineering- I	2.33	2.50	3.00	1.00		2.00	2.00	1.00						2.17		
	C407	CE407	Transportation Engineering -II	2.00		2.50	2.00		1.80	1.00							1.33		
	C409	CE409	Quantity Surveying and	2.80	2.20	2.00	1.33							1.00			2.80	1.00	
	C411	CE467	Highway Pavement Design	2.00	1.50	2.00											2.00		
	C413	CE469	Environmental Impact	2.67	2.60				3.00	2.50	1.00						2.33	2.00	
	C415	CE451	Seminar & Project Preliminary	2.00	3.00	3.00	3.00					3.00	3.00		3.00	2.50	3.00	3.00	3.00
C417	CE431	Environmental Engineering Lab	3.00			3.00					3.00	3.00		3.00	3.00	2.50	2.00		
S8	C402	CE402	Environmental Engineering II	2.33	2.50		2.00		2.00	1.00							1.67		
	C404	CE404	Civil Engineering Project	1.83	2.00				1.00		3.00			1.00			1.00		1.00
	C406	CE462	Town and Country Planning	2.50	1.50	2.00	2.00										1.67		1.00
	C408	ME482	Energy Conservation and		2.67	2.20			2.50	2.40									2.17
	C410	CE492	Project	3.00	2.50	3.00	3.00	1.50				2.67	2.50	2.00	2.00	2.33	1.50	1.00	
<b>PO Target(Average)</b>				<b>2.30</b>	<b>2.09</b>	<b>2.16</b>	<b>1.83</b>	<b>1.73</b>	<b>2.00</b>	<b>1.70</b>	<b>1.45</b>	<b>2.14</b>	<b>1.86</b>	<b>1.57</b>	<b>1.55</b>	<b>1.99</b>	<b>1.55</b>	<b>1.64</b>	

*Dr. J. K. Srinivas*





TARGET ATTAINMENT LEVELS OF POs AND PSOs ACADEMIC YEAR 2018-2019(Batch 2015-2019)

Sem	Course Code		Course Name	PROGRAM OUTCOMES														
				PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
S1	C101	MA101	CALCULUS	3.00	3.00		1.00								1.00	2.00		
	C103	CY100	ENGINEERING CHEMISTRY	3.00	3.00											2.67		
	C105	BE 100	ENGINEERING MECHANICS	2.83	2.17											2.83		
	C107	BE 101-05	INTRODUCTION TO COMPUTING AND PROBLEM SOLVING	2.00	2.67	2.75	2.00	2.00								1.00	1.75	1.00
	C109	BE 103	INTRODUCTION TO SUSTAINABLE ENGG.	1.33					2.00	2.83	1.50			1.00	2.00	1.33	1.00	
	C111	ME 100	BASIC MECHANICAL ENGINEERING	3.00	2.00											1.00		
	C113	CY110	ENGINEERING CHEMISTRY LAB	3.00	3.00	1.00	2.00		1.00			2.00				3.00		
	C115	CS110	COMPUTER WORKSHOP	1.33	2.50			2.00								1.00	1.50	2.00
	C117	ME110	BASIC MECHANICAL WORKSHOP	2.60	2.00							2.00	2.00		1.25	1.75		
S2	C102	MA102	DIFFERENTIAL EQUATIONS	3.00	2.00		1.00	1.00							1.00	2.00		
	C104	PH 100	ENGINEERING PHYSICS	3.00	3.00											2.67		
	C106	BE 110	ENGINEERING GRAPHICS	2.00	2.00			2.00								3.00		
	C108	BE 102	DESIGN AND ENGINEERING	1.50	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
	C110	EE 100	BASICS OF ELECTRICAL ENGG.	1.83	1.00	1.50		1.00	1.00	1.33						2.33		
	C112	EC 100	BASICS OF ELECTRONICS ENGG.	2.50	3.00								3.00			0.96		
	C114	PH110	ENGINEERING PHYSICS LAB	3.00	1.00			1.00				2.00				1.00		
	C116	EE110	ELECTRICAL ENGINEERING WORKSHOP		2.00							2.00	2.00			2.00		
	C118	EC110	ELECTRONICS ENGINEERING WORKSHOP	2.00									1.00			2.00		
S3	C215	MA201	LINEAR ALGEBRA AND COMPLEX ANALYSIS	2.50	2.50	3.00										2.00		
	C201	CS201	DISCRETE COMPUTATIONAL STRUCTURES	3.00	2.40	1.33										3.00		
	C203	CS203	SWITCHING THEORY AND LOGIC DESIGN	2.00	2.00	3.00	2.00	2.00								2.80	1.00	1.50
	C205	CS205	DATA STRUCTURES	1.00	1.00	2.00	2.00									1.00	2.00	1.50







	C312	CS364	MOBILE COMPUTING	3.00	1.50	1.00								2.00	2.00	2.00	1.00	
	C314	CS332	MICROPROCESSOR LAB	1.50	1.00	2.25		1.67						1.00	2.50	2.00		
	C316	CS334	NETWORK LAB	2.00	2.00	3.00		1.00			2.00	3.00			2.33			
	C318	CS352	COMPREHENSIVE EXAM	3.00	1.00							1.00			1.00	1.00		
S7	C401	CS401	COMPUTER GRAPHICS	2.00	1.00	2.00	2.00	3.00						2.00	1.00	1.00	1.00	
	C403	CS403	PROGRAMMING PARADIGMS	3.00	2.00	2.00									2.33	2.33	1.00	
	C405	CS405	COMPUTER SYSTEM ARCHITECTURE	1.75	2.60	2.50								2.00	1.80	1.00	1.00	
	C407	CS407	DISTRIBUTED COMPUTING	1.50	2.50	2.40	2.00											
	C409	CS409	CRYPTOGRAPHY AND NETWORK SECURITY	1.67	1.50	1.00									1.80			
S7	C411	CS467	MACHINE LEARNING	2.00	2.20	2.00									2.33	1.50	1.00	
	C413	CS451	SEMINAR & PROJECT PRELIMINARY	2.00	2.50	3.00	3.00	3.00	2.00		3.00	3.00	3.00	2.00	3.00	2.50	3.00	
	C415	CS431	COMPILER DESIGN LAB	2.00	2.00			2.00							3.00	3.00	2.50	
S8	C402	CS402	DATAMINING AND WAREHOUSING	1.29	2.67	1.00									2.00	1.00		
	C404	CS401	EMBEDDED SYSTEM	3.00	2.00	3.00	1.00								2.00	2.00	1.67	
	C406	CS464	ARTIFICIAL INTELLIGENCE	2.40	1.80	2.20	1.20							2.00	2.00	1.80		
	C408	CS466	DATA SCIENCE	2.00	1.00		2.00	2.25					2.00		2.00	2.40	1.00	
	C410	CE488	DISASTER MANAGEMENT	2.74	2.74	3.00			1.00						1.00			
	C412	CE482	ENVIRONMENTAL IMPACT ASSESSMENT	3.00	3.00	2.00			3.00	3.00	1.00				3.00	2.00		
	C414	CS492	PROJECT	2.00	2.50	3.00	3.00	3.00	2.00		3.00	3.00	3.00	2.00	3.00	2.50	3.00	
PO ATTAINMENT TARGET(AVERAGE):				2.27	2.01	2.12	1.79	1.98	1.86	2.02	1.79	2.14	2.27	1.86	1.48	1.96	1.67	1.46

File No: P-27.1

File Name: CO ATTAINMENT – DIRECT &amp; INDIRECT

Retention Period: 3 years

**DIRECT ATTAINMENT – BATCH 15 (2015-2019)**

Index	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C101	2.87	2.87		0.96								0.96	1.91		
C102	1.87	1.87											0.93		
C103	2.53	1.93											2.60		
C104	0.86	0.57											0.29		
C105	1.09					1.46	2.19	1.23				1.45	0.90	0.87	
C106	0.83	0.46								0.91			0.91		
C107	3.00				1.00				2.00				1.00		
C108	2.00	1.00								1.00			1.00		
C109	2.60	2.00							2.00	2.00		1.25	1.75		
C110	2.62	1.74		0.87	0.87							0.87	1.74		
C111	1.66	1.66											1.46		
C112	1.72				0.29								2.59		
C113	1.34	0.89	0.89	0.89		0.89	0.89	0.89	0.89	0.89			0.89	0.89	
C114	1.03	1.47				0.92							0.74		
C115	1.51	1.87	2.05		1.87	1.87	1.47						0.61		
C116	3.00	3.00	1.00	2.00		1.00			2.00				3.00		
C117	2.33									2.00			1.00		
C118	2.00	3.00											2.00		
C201	1.96	1.96	2.35										1.57		
C202	0.37	0.37	0.37			0.30		0.10	0.10	0.10			0.26	0.17	0.10
C203	1.50	0.83											1.00		
C204	0.57	0.41											0.45		
C205	1.81	0.97				0.28							1.67		
C206				1.00			1.00	1.00	2.00	3.00			1.00		
C207	2.50		1.60		1.00					1.60		2.00	1.75	3.00	
C208	2.50	2.50		2.50						2.40			2.50	0.90	0.90



File No: P-27.1

File Name: CO ATTAINMENT - DIRECT & INDIRECT

Retention Period: 3 years

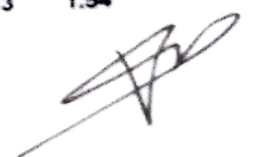
C209	2.50	2.50	2.00	2.00		3.00	3.00									2.00		
C210	0.57	0.57														0.53	0.20	
C211	2.21	1.56														2.34		
C212	0.83	0.46														0.55		
C213	1.49	0.37														2.23		
C214																0.62		
C215	3.00			2.00						2.00				1.33		3.00		
C216	3.00	2.00								2.50	2.50					2.00		
C301	1.48	1.24														0.99	0.49	
C302	1.07	1.07														1.07		
C303	1.84	1.84	2.86	1.84	1.84											0.92	2.58	0.92
C304	1.51	0.84	1.81													1.31		1.38
C305	1.49	0.93								1.87						0.93		
C306	1.79	0.90		0.90						1.87	1.87	1.87	1.87			1.79		
C307	3.00	3.00	2.00	2.00												3.00		
C308	2.00	1.75														2.00		
C309	3.00			3.00												2.00		
C310	1.72	1.22	0.85													0.61		
C311	0.54	0.54	0.27													0.27		
C312	2.25	1.50	1.50													0.54	0.54	
C313	1.44	1.00														2.13		
C314	1.97	0.98														1.22		
C315	2.18	2.18														1.97		
C316	3.00	3.00														1.54	1.03	
C317	3.00			3.00												1.00	2.00	3.00
C318	3.00	2.50														2.00		
C401	1.65	1.47	1.10													2.00	1.50	2.00
C402	2.70	0.90														1.00	1.10	
C403	2.72	2.54	1.59	0.91												1.10	1.10	
C404	2.60	2.60														2.70		
C405	2.39	2.39														1.80	1.80	
C406	1.62	2.11														0.91	0.91	
C407	2.67	1.78														0.91		
C408	1.75	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	2.54	
C409	3.00	2.00														1.53	0.92	
																1.55	0.85	
																1.76	1.76	
																0.88		
																2.67		
																1.50	1.50	1.00
																2.00		

File No: P-27.1

File Name: CO ATTAINMENT - DIRECT & INDIRECT

Retention Period: 3 years

C410	1.67	1.48	1.11											1.11	1.11	
C411	0.99	1.12		1.24										1.24		
C412	1.52	1.38										1.90	1.90	0.95	1.90	1.90
C413	1.90	1.90	1.90			1.90	2.85							0.38	0.38	
C414	1.13	0.75				0.47	0.94	0.38						0.91		
C415	2.72	2.72	1.81			0.91								2.00	2.00	2.00
C416	1.75	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.50	1.00	3.00	2.00	2.00	2.00	
<b>DIRECT ATTAINMENT (DA)</b>	<b>1.95</b>	<b>1.59</b>	<b>1.55</b>	<b>1.59</b>	<b>1.32</b>	<b>1.23</b>	<b>1.44</b>	<b>0.93</b>	<b>1.65</b>	<b>1.76</b>	<b>1.42</b>	<b>1.51</b>	<b>1.56</b>	<b>1.13</b>	<b>1.54</b>	





## INDIRECT ATTAINMENT

## COURSE EXIT SURVEY – BATCH 15 (2015-2019)

Index	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C101	3	3		1								1	2		
C102	1.44	1.44											0.72		
C103	1.48	1.32											0.74		
C104	2.97	1.98											0.99		
C105	1					1.39	2.21	1.13				1.49	0.96	1	
C106	1.73	0.94								1.89			1.61		
C107	2.5				0.83				1.67				0.83		
C108	1.56	0.78								0.78			0.78		
C109	2.6	2							2	2		1.25	1.75		
C110	2	1.33		0.67	0.67							0.67	1.33		
C111	2.33	2.33											2.07		
C112	2				0.33								3		
C113	1.5	1	1	1		1	1	1	1	1			1	1	
C114	0.87	1.44				0.87				0.87			1		
C115	1.86	2.2	2.1		2.3	2.2	1.9						1.5		
C116	3	3	1	2		1			2				3		
C117	2.2									1.89					
C118	3	3											3		
C201	2.29	2.29	2.75										1.83		
C202	1.83	1.83	1.83			1.83		0.61	0.61	0.61			1.59	1.02	0.61
C203	2.9	1.61											1.93		
C204	2.49	1.79											1.99		
C205	2.17	1.17				0.33							2		
C206				0.73			0.73	0.73	1.47	2.2			0.73		
C207	2.22		1.42		0.89					1.42		1.78	1.56	2.67	
C208	3	3		3						2.67			3	1	1
C209	2.5	2.5	2	2		3	3						2		

File No: P-27.1

File Name: CO ATTAINMENT - DIRECT & INDIRECT

Retention Period: 3 years

																		1.96	0.73
																		2.75	
C210	2.08	2.08																1.96	
C211	2.6	1.83																3	
C212	2.93	1.63																0.56	
C213	2	0.5																3	
C214																		2	
C215	3				2													2.33	2.33
C216	2.8	1.87																	
C301	2.9	2.42																	
C302	1.72	1.72																	
C303	1.2	1.2	1.8	1.2	1.2														
C304	2.5	2	2.5																
C305	1.58	0.99																	
C306	1.73	0.94																	
C307	3	3	2	2															
C308	3	2.5																	
C309	2.8																		
C310	2.74	1.93	1.35																
C311	1.78	1.78	0.89																
C312	3	2	2																
C313	1.44	1																	
C314	2	1																	
C315	2.49	2.49																	
C316	3	3																	
C317	2.8																		
C318																			
C401	1.8	1.6	1.2																
C402	3	1																	
C403	2.67	2.49	1.56	0.89															
C404	2.49	2.49																	
C405	2.49	2.49																	
C406	1.83	2.4																	



File No: P-27.1

File Name: CO ATTAINMENT – DIRECT &amp; INDIRECT

Retention Period: 3 years

<b>C407</b>	3	2										3			
<b>C408</b>	1.75	2	2	1	1	1	1	1	1	2.5	1	3	1.5	1.5	1
<b>C409</b>	3	2							3	2			2		
<b>C410</b>	2.17	1.93	1.44										1.44	1.44	
<b>C411</b>	1.19	1.33		1.48							1.78		1.48		
<b>C412</b>	1.68	1.53											2.75		
<b>C413</b>	1.67	1.67	1.67			1.67	2.5				1.67	1.67	0.83	1.67	1.67
<b>C414</b>	2.6	1.73	0	0	0	1.08	2.17	0.87	0	0	0	0	0.87	0.87	0
<b>C415</b>	1.8	1.8	1.2			0.6							0.6		
<b>C416</b>	1.75	2	2	1	1	1	1	1	1	2.5	1	3	2	2	2
<b>INDIRECT ATTAINMENT - COURSE EXIT SURVEY (A)</b>	<b>2.25</b>	<b>1.86</b>	<b>1.61</b>	<b>1.47</b>	<b>1.12</b>	<b>1.41</b>	<b>1.61</b>	<b>1.04</b>	<b>1.57</b>	<b>1.72</b>	<b>1.14</b>	<b>1.36</b>	<b>1.82</b>	<b>1.31</b>	<b>1.27</b>

File No: P-27.1

File Name: CO ATTAINMENT – DIRECT &amp; INDIRECT

Retention Period: 3 years

**PROGRAM EXIT SURVEY (BATCH 2015-2019) TOTAL NO. OF RESPONSES RECEIVED: 85**

DESCRIPTION	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
NO. OF STUDENTS GIVEN A RATING ABOVE FOUR	71	67	60	56	67	65	72	72	78	69	66	72	66	72	59
PERCENTAGE	83.53	78.82	70.59	65.88	78.82	76.47	84.71	84.71	91.76	81.18	77.65	84.71	77.65	84.71	69.41
INDIRECT ATTAINMENT – PROGRAM EXIT SURVEY - B	3	2.9	2.1	1.6	2.9	2.6	3	3	3	3	2.8	3	2.8	3	1.9

**EMPLOYER SURVEY (BATCH 2015-2019) TOTAL NO. OF RESPONSES RECEIVED: 13**

DESCRIPTION	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
NO. OF EMPLOYERS GIVEN A RATING ABOVE FOUR	11	12	10	11	11	11	11	11	12	12	10	12
PERCENTAGE	84.62	92.31	76.92	84.62	84.62	84.62	84.62	84.62	92.31	92.31	76.92	92.31
INDIRECT ATTAINMENT – EMPLOYER SURVEY - C	3.00	3.00	2.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.70	3.00

**ALUMNI SURVEY (BATCH 2015-2019) TOTAL NO. OF RESPONSES RECEIVED: 67**

DESCRIPTION	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
NO. OF ALUMNI GIVEN A RATING ABOVE FOUR	46	52	47	52	49	58	55	58	60	60	58	60
PERCENTAGE	68.66	77.61	70.15	77.61	73.13	86.57	82.09	86.57	89.55	89.55	86.57	89.55
INDIRECT ATTAINMENT – ALUMNI SURVEY - D	1.90	2.80	2.00	2.80	2.30	3.00	3.00	3.00	3.00	3.00	3.00	3.00



File No: P-27.1

File Name: CO ATTAINMENT – DIRECT &amp; INDIRECT

Retention Period: 3 years

SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

COURSE WISE - PO AND PSO ATTAINMENT

Name of Faculty:	DR. VENU P	BATCH 15
Course Code:	C501	
Course Name:	CO CURRICULAR AND EXTRA CURRICULAR ACTIVITIES	

CO-PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C501.1			1				1	3			2	2			
C501.2		1			2							3			
C501.3						3			3			3			
C501.4						3			3			3			
C501.5						3	2	1	2			1			
C501.6	1	1	1	1	1	1	1	1	1	1	1	1			
<b>Average</b>	1.00	1.00	1.00	1.00	1.50	2.50	1.33	1.67	2.25	1.00	1.50	2.17	0.00	0.00	0.00

Actual CO - PO Attainment for the Final CO attained Value of CO CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>PO INDIRECT ATTAINMENT - E</b>	1.00	1.00	1.00	1.00	1.50	2.50	1.33	1.67	2.25	1.00	1.50	2.17	0.00	0.00	0.00

## PO ATTAINMENT – BATCH 15 (2015-2019)

ATTAINMENT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>DIRECT ATTAINMENT (DA)</b>	1.95	1.59	1.55	1.59	1.32	1.23	1.44	0.93	1.65	1.76	1.42	1.51	1.56	1.13	1.54
<b>COURSE EXIT SURVEY – A</b>	2.25	1.86	1.61	1.47	1.12	1.41	1.61	1.04	1.57	1.72	1.14	1.36	1.82	1.31	1.27
<b>PROGRAM EXIT SURVEY – B</b>	3.00	2.90	2.10	1.60	2.90	2.60	3.00	3.00	3.00	3.00	2.80	3.00	2.80	3.00	1.90
<b>EMPLOYER SURVEY – C</b>	3.00	3.00	2.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.70	3.00	-	-	-
<b>ALUMNI SURVEY – D</b>	1.90	2.80	2.00	2.80	2.30	3.00	3.00	3.00	3.00	3.00	3.00	3.00	-	-	-
<b>CO-CURRICULAR AND EXTRA CURRICULAR ACTIVITIES – E</b>	1.00	1.00	1.00	1.00	1.50	2.50	1.33	1.67	2.25	1.00	1.50	2.17	-	-	-
<b>OVERALL INDIRECT ATTAINMENT IDA = <math>\frac{(A + B + C + D + E)}{5}</math></b>	2.23	2.31	1.88	1.97	2.16	2.50	2.39	2.34	2.56	2.34	2.23	2.51	2.31	2.16	1.59
<b>CO ATTAINMENT = <math>(0.8 \times DA + 0.2 \times IDA)</math></b>	2.01	1.71	1.69	1.60	1.53	1.62	1.61	1.39	1.88	1.98	1.59	1.72	1.76	1.44	1.87