Manual for
CO-PO-PSO
Attainment and Assessment Process

Introduction

The institution practices a blended learning system and it is ensured that the teaching-learning process is updated as per new guidelines issued by the UGC/NAAC/parent University. The faculty stay abreast of latest developments in the field of education. IQAC of the institution is a key force in guiding the teaching community in guaranteeing the introduction and implementation of outcome-based teaching and learning. As TKMCAS is affiliated to the University of Kerala, the institution is bound by the norms stipulated in this regard by the latter. In compliance with the affiliated University's norms, the IQAC not only ensures the enumeration of PO/PSO/COs of all UG and PG programs and courses but also the implementation of innovative ways for outcome attainment and mapping.

Process of Establishing the PO-PSO-CO

The university has implemented outcome based education from 2020 and the POs and Cos are listed in the syllabus for each programs. A committee comprising of HODs, faculty advisors and IQAC members prepares a final version by compiling the data given in syllabus.

Statements of PO

Program outcomes: Describe what students are expected to know and would be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire as they progress through the program.

UNDERGRADUATE PROGRAMMES – B.A/B.Sc/B.Com	
PO1	**Critical Thinking**: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2	**Problem Solving**: Identify, formulate, conduct investigations, and find solutions to problems based on in-depth knowledge of relevant domains.
PO3	**Communication**: Speak, read, write and listen clearly in person and through electronic media in English/language of the discipline, and make meaning of the world by connecting people, ideas, books, media and technology.
PO4	**Responsible Citizenship**: Demonstrate empathetic social concern, and the ability to act with an informed awareness of issues.
PO5	**Environment and Sustainability:** Understand the impact of technology and business practices in societal and environmental contexts, and sustainable development
PO6	**Social Interaction:** Elicit views of others, mediate disagreements and help reach conclusions in group settings.
PO7	**Computational Thinking:** Understand data-based reasoning through translation of data into abstract concepts using computing technology-based tools

POSTGRADUATE PROGRAMMES – M.A/M.Sc/M.Com	
PO1	**Problem Solving and Research Skill:** Carry out research/investigation and development work to solve practical problems
PO2	**Lifelong Learning:** Demonstrate a degree of mastery over the area as per the specialization of the program.
PO3	**Scholarship of knowledge:** Apply advanced knowledge and skills appropriate to the discipline.
PO4	**Collaborative and Multidisciplinary work:** Think critically and apply appropriate logic, analysis, judgment and decision making and to function as an effective member or leader of teams to achieve common goals.

PO5	**Communication:** Write and present a substantial technical report/document.

Statements of PSO

Program Specific Outcomes are statements that describe what the graduates of a specific engineering program should be able to do.

Sample PSO statements

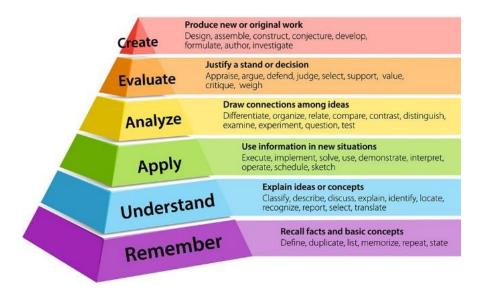| **Name of the program: BA Economics and Mathematics (double main)**	
PSO1	Provide a strong foundation in Economics and Mathematics
PSO2	Enable students to acquire necessary skills for analyzing basic economic issues at the micro and macro levels.
PSO3	Acquaint students with the essential mathematical and statistical methods and tools to be applied in the analytical aspects of Economics.
PSO4	Enable students to acquire the technical and analytical skills to proceed to a successful career in finance, business and many other fields or to proceed to further study in mathematics/economics.
Name of the program: Post graduate program in Commerce (MCom)	
PSO1	Understand the various strategies in business, and competencies in scanning the Business Environment and its Regulatory Framework and the use of information technology in all its aspects, the relevance of ethical decision making in sustainable development of different stakeholders.
PSO2	Acquire knowledge and required skills in carrying out research with the application of Quantitative Techniques and Business Econometrics.

PSO3	Apply knowledge and skill in analyzing securities and constructing portfolios for optimal investment, evaluating national and state budget, solving optimization problems in business using management science models
PSO4	Attain skill for applying knowledge in tax planning and management of individuals and businesses,

Name of the program: First degree program in Botany (BSc Botany)	
PSO1	Understand structure and reproduction of plant forms algae, fungi,bryophytes, pteridophytes, gymnosperms and angiosperms
PSO2	Understand basic concepts in methodology of science, plant systematics, ecology, anatomy, cell biology, physiology, molecular biology, genetics, plant breeding, biotechnology and bioinformatics
PSO3	Understand recent trends in biological branches molecular biology, biotechnology, horticulture plant breeding and Nano biotechnology.
PSO4	Experiment with essential laboratory practical's in anatomy, cytology, microtechnique, physiology, taxonomy, morphology, biochemistry and biophysics.

Statements of CO

Statements indicating what a student can do after the successful completion of a course. Every Course leads to some Course Outcomes. The CO statements are defined by considering the course content covered in each module of a course.

The keywords used to define COs are based on Bloom's Taxonomy.

Bloom's Taxonomy

Create — Produce new or original work
Design, assemble, construct, conjecture, develop, formulate, author, investigate

Evaluate — Justify a stand or decision
Appraise, argue, defend, judge, select, support, value, critique, weigh

Analyze — Draw connections among ideas
Differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

Apply — Use information in new situations
Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

Understand — Explain ideas or concepts
Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

Remember — Recall facts and basic concepts
Define, duplicate, list, memorize, repeat, state

Sample CO statements

Name of the program: MSc Mathematics			
Course Code	**Course name**	**Course outcomes**	
Semester 1			
MM 211	**Linear Algebra**	**CO1**	Explain basic structure of finite dimensional vector spaces
		CO2	Describe linear maps and identify its one to one correspondence with matrices.
		CO3	Identify the existence of invariant subspaces of finite dimensional vector spaces.
		CO4	Describe characteristic polynomial and minimal polynomial of an operator.

		CO5	Explain the condition for an operator to have a basis consisting of generalized eigenvectors.
MM 212	**Real Analysis I**	CO1	Discuss functions of bounded variation and their properties
		CO2	Define Riemann- Stieltjes integral and derive various results involving them
		CO3	Describe Pointwise as well as uniform convergence of sequences of functions
		CO 4	Understand total derivatives and derive theorems involving them.
		CO 5	Derive Inverse function theorem and Implicit function theorem
MM 213	**Ordinary Differential Equations**	CO1	Understand metric space and topological space
		CO2	Compare convergence of sequences in different topological spaces
		CO3	Understand compact and connected space
		CO4	Explain basic results on compact and connected space
Semester 2			
MM 221	**Abstract Algebra**	CO1	Classify finite abelian groups using the Fundamental theorem of finite abelian groups.
		CO2	Apply Sylow theorem and non-simplicity tests to classify simple groups.

		CO3	Discuss extension fields and its characterization.
		CO4	Classify finite fields and explain its structure.
		CO5	Explain fundamental theorem of Galois theory
		CO6	Illustrate the insolvability of quintic.
		CO7	Explain cyclotomic polynomials and constructible regular n-gons.
MM 222	Real Analysis II	CO1	Define Lebesgue outer measure, measurable sets and measurable functions and derive basic theorems involving them
		CO2	Define integration and compare Riemann and Lebesgue integrals
		CO3	Discuss about measure spaces and integration with respect to a measure
		CO4	Understand the Lp spaces and its completeness
		CO 5	Derive Hahn decomposition, Jordan decomposition and Radon - Nykodym Theorems
MM 223	Topology II	CO1	Explain T0,T1,T2,Normal and regular spaces
		CO2	Understand separation by continuous function
		CO3	Explain Tychnoff theorem

		CO4	Understand the construction of fundamental groups of topological space
MM 224	**Partial Differential Equations and Calculus of Variation**	CO1	Classify partial differential equations.
		CO2	Interpret the solution of the partial differential equation.
		CO3	Solve integral equations of several types.
		CO4	Understand problems in calculus of variations

Name of the program: First degree program in Physics (BSc Physics)			
Semester 4			
PY1541 **4L** **4 credits**	**QUANTUM MECHANICS**	CO1	Illustrate limitations of classical physics
		CO2	Understand basic concepts of matter waves, wave function and wave packets.
		CO3	Discuss Schrodinger's time independent and time dependent equations and applications of the same on one dimensional cases.
		CO4	Practise general formalism of quantum mechanics
PY1542		CO1	Understand different steps in scientific research

4L **4 Credits**	**STATISTICAL PHYSICS, RESEARCH METHODOLOGY AND DISASTER MANAGEMENT**	**CO2**	Identify different types of disasters and understand effective management techniques.
		CO3	Compute the errors in experimental observations
		CO4	Identify the bridging of thermodynamics to statistical physics
PY1543 **4L** **4 Credits**	**ELECTRONICS**	**CO1**	Understand fundamental concepts of doping, semiconductor diodes and transistors
		CO2	Discuss different modulation methods
		CO3	Explain the features of operational amplifiers
		CO4	Relate different oscillators
		CO4	Differentiate qualities of molecules and atoms and their suitable spectroscopic analysis

Publishing the PO-PSO-CO

The PO-PSO-CO statements are published and disseminated using the following methods.

- Distributed along with syllabus
- Explanations to students during orientation sessions
- Displayed in college/department notice boards
- Uploaded in college website https://tkmcas.ac.in/po-co-2/

CO-PO and CO-PSO Mapping of Courses

After writing the CO statements, CO will be mapped with PO of the program. The faculty advisor has review the CO statements and the CO-PO mapping which has been done by course coordinator. The faculty advisor has to consolidate the CO's of the respective year/semester and maintain the documentation of the CO attainment level of the respective year/semester courses as well as documentation of the individual student's extra-curricular and co-curricular activities. These details will hand over to the Head of the department in order to evaluate PO attainment of the individual course at the end of the program. All these works have to be done under the guidance of Internal Quality Assurance Cell (IQAC).

All the courses together must cover all the POs (and PSOs). For a course we map the COs to POs through the CO-PO matrix and to PSOs through the CO-PSO matrix as shown below. The various correlation levels are:

"1" – Slight (Low) Correlation
"2" – Moderate (Medium) Correlation
"3" – Substantial (High) Correlation

"-" – Indicates there is no correlation.

Sample CO-PO and CO-PSO mapping

T.K.M. COLLEGE OF ARTS AND SCIENCE, KOLLAM															
FACULTY NAME:	Adersh V K														

PROG. NAME	Mathematics								BATCH	2019-22
PROGRAMME	BSc.			YEAR:	III				SEMESTER	6
COURSE NAME:	Linear Algebra								COURSE CODE	MM 1644

PO ATTAINMENT USING CO (DIRECT METHOD)

CO PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4
CO1	1	2	-	-	-	-	1	-	-	-	-	1	3	2	-
CO2	2	1	-	-	-	.	-	-	-	-	-	2	1	1	-
CO3	2	1	-	-	-	-	3	-	-	-	-	2	1	3	-
CO4	1	3	-	-	-	-	1	-	-	-	-	1	2	2	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WT. AVG	1.50	1.75					1.67					1.50	1.75	2.00	

Overall Mapping of Subject	1.69

Process involved in CO-PO mapping

Step 1: Obtain Course Outcome.

Step 2: Mapping of Course Outcome with Program Outcome by the course coordinator

Step 3: The faculty advisor and head of the department review the CO statement and CO-PO mapping

Step 4: The documentation for the CO attainment target level prepared by course coordinator

Step 5: Setting weightage for CO assessment by course coordinator for internal exam question paper, assignment and seminar.

Step 6: CO measurement through assessment by course coordinator

Step 7: Obtain CO attainment table through direct assessment methods.

Step 8: Obtain PO attainment table through direct assessment methods.

Step-9: Submit CO PO attainment report to Faculty advisor.

Step-10: The faculty advisor submit the CO-PO attainment along with curriculum gap identified in the course and recommendations for the actions to be taken to Head of the department.

Step-11- H.O.D would consolidate the CO and PO attainment of the programme with all the identified gaps and submit report to IQAC.

Step-11- IQAC will list out the steps to be taken to bridge the curricular gap. Contend beyond the syllabus may be delivered to the students through teaching, arranging guest lectures, providing online videos courses, external training, online quiz etc.

Sample CO-PO-PSO attainment tables

T.K.M. COLLEGE OF ARTS AND SCIENCE, KOLLAM															

FACULTY NAME:	Adersh V K										

PROG. NAME	Mathematics			BATCH	2019-22
PROGRAMME	BSc.	YEAR:	III	SEMESTER	6
COURSE NAME:	Linear Algebra			COURSE CODE	MM 1644

PO ATTAINMENT USING CO (DIRECT METHOD)

CO PO MAPPING

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4
CO1	1	2	-	-	-	-	1	-	-	-	-	1	3	2	-
CO2	2	1	-	-	-	-	-	-	-	-	-	2	1	1	-
CO3	2	1	-	-	-	-	3	-	-	-	-	2	1	3	-
CO4	1	3	-	-	-	-	1	-	-	-	-	1	2	2	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WT. AVG	1.50	1.75					1.67					1.50	1.75	2.00	

Overall Mapping of Subject	1.69

CO - PO-PSO ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4
CO1	0.70	1.40					0.70					0.70	2.10	1.40	
CO2	1.40	0.70										1.40	0.70	0.70	
CO3	1.40	0.70					2.10					1.40	0.70	2.10	
CO4	0.70	2.10					0.70					0.70	1.40	1.40	
CO5															
AVG	1.05	1.22					1.16					1.05	1.22	1.40	

Overall Attainment of Subject	1.18

	OVERALL ATTAIMENT			ABSENTEE+NOT ATTEMPT	0	0	0	0	0
1	Attainment through internal assessment:	3.00		PRESENT STUDENT OR ATTEMPT	46	46	46	46	46
2	Attainment through university examination:	2.52	A T T A I N M E N T T A B L E	NO. OF STUDENTS SECURE MARKS > THRESHOLD MARKS	30	42	40	38	46
3	Weightage given to the Internal examination (20%):	0.60		% OF STUDENTS SECURE MARKS > THRESHOLD MARKS	65.22	91.30	86.96	82.61	100.00
4	Weightage given to the university examination (80%):	2.02		Attainment (3 ≥ 70%, 2 ≥60%, 1 ≥ 50%)	2.52	3.00	3.00	3.00	3.00
5	Final attainment level of the course (by Direct Assessement):	2.62		Final attainment level CO (by Direct Assessement):	2.62	2.62	2.62	2.62	

Sample CO-PO-PSO matrix for the program/semester

Program: First degree program in Mathematics
Semester: 6
Number of courses: 5

CO Attainment

	Course Code	CO1	CO2	CO3	CO4	CO5	Remarks
Semester 6	**MM 1641**	2.62	2.62	2.62	2.62	-	
	MM 1642	2.56	2.56	2.56	2.56	2.56	
	MM 1643	0.60	0.60	0.60	0.60	0.59	
	MM 1644	2.10	2.10	2.10	2.10	2.10	
	MM 1645	1.49	1.49	1.49	1.49	-	
	MM 1651	3.00	3.00	2.90	2.82		

PSO-PO Attainment

	Course Code	PO1	PO2	PO3	PO7	PSO1	PSO2	PSO3	PSO4	Remarks
Semester 6	**MM 1641**	1.75	1.50	2.00	1.50	1.25	2.25	1.75	--	
	MM 1642	1.70	1.70	-	1.70	1.70	1.92	1.28	2.56	

MM 1643	0.52	0.40	-	0.33	0.60	0.40	0.40	0.60	
MM 1644	1.05	1.22	-	1.16	1.05	1.22	1.40	-	
MM 1645	0.99	0.99	-	-	1.24	0.99	0.99	0.87	
MM 1651	2.50	1.75		1.00	3.00	2.00	2.00	-	

Overall Attainment

	Course Code	Overall Mapping	**Minimum attainment**	**Overall Attainment**	**Remarks**
Semester 6	**MM 1641**	1.71	1.50	1.50	
	MM 1642	2.11	1.50	1.79	
	MM 1643	2.32	1.50	0.46	
	MM 1644	1.69	1.50	1.18	
	MM 1645	2.04	1.50	1.01	
	MM 1651	2.04	1.50	2.04	

Assessment Process for CO attainment

Course Outcome is evaluated based on the performance of students in internal assessments and in university examination of a course. Internal assessment contributes 20% and university assessment contributes 75% to the total attainment of a CO.

CO Assessment

Internal Assessment 20%

University assessment 80%

Assessment Parameters: The performance of a student in each semester shall be evaluated course-wise with a maximum of 100 marks.

(i) Pattern for Internal Examinations: For theory courses of each semester there shall be one internal exams. The exam consists of 90 minutes with a maximum mark of 40. The internal exam will be taken for the assessment of internal marks.

(ii) CO-wise assessment Rubrics: Every internal exam question and every assignment/seminar is mapped to a specific CO. Thereafter, a CO -wise cut-off value is taken based on the highest mark secured for that CO and the number of students with their internal mark above the cutoff value is considered for rating the CO attainment.

No. of students having marks >cut-off	Rating in 3 scale
>=70%	3
60% to 69%	2
50% to 59%	1
<50%	0

Pattern for External End Examinations: There shall be an external examination conducted by the University for every Theory Course and the duration of the time for this end examination is 3 hours.

Assessment Rubrics: An overall cut-off value is taken for all CO's commonly based on the highest mark secured and the number of students with their external mark above the cut-off value is considered for rating all CO attainments.

Overall Attainment: The Final CO attainment is calculated by combining the internal attainment and External attainment in a ratio of 20:80.

Final Value = 20% of Internal Level + 80% of External Level

% of students scoring $\geq$ threshold $=$

$$\frac{\text{No. of students scoring} \geq \text{internal threshold}}{\text{No. of students attempted}} \times 100$$

Sample calculation of CO-attainment for a course

T.K.M. COLLEGE OF ARTS AND SCIENCE, KOLLAM

Faculty Name:	Niza N		PROG. NAME		Mathematics		COURSE NAME		Integral Transforms	
PROGRAMME	BSc.	YEAR	III	SEM	6	COURSE CODE		MM 1645	BATCH	2019-22

Attainment for Midterm & University Examination

S. No.	Reg. No.	Name of Student	Internal Exam CO1	CO2	CO3	CO4	CO5	Assignment & Seminar CO1	CO2	CO3	CO4	CO5	ESE KU	CO1 %	CO2 %	CO3 %	CO4 %	CO5 %	ΣCO %
		CO WISE MAXIMUM MARKS	6	4						5	5		80	100	100	100	100		100
1	22019142001	AAYISHA .S	6.00	4.00	0.00	0.00				5.00	5.00		45.00	100.00	100.00	100.00	100.00		100.00
2	22019142002	ABHIRAMI M	6.00	3.50	0.00	0.00				5.00	5.00		30.00	100.00	87.50	100.00	100.00		96.88
3	22019142003	AFIYA S	5.00	4.00	0.00	0.00				5.00	5.00		49.00	83.33	100.00	100.00	100.00		95.83
4	22019142004	AMINA. S	5.50	4.00	0.00	0.00				5.00	5.00		28.00	91.67	100.00	100.00	100.00		97.92
5	22019142005	ANAKHA.M	4.50	4.00	0.00	0.00				5.00	5.00		51.00	75.00	100.00	100.00	100.00		93.75
6	22019142006	ASHMIMOL. L	5.50	4.00	0.00	0.00				5.00	5.00		39.00	91.67	100.00	100.00	100.00		97.92
7	22019142008	DEVIKA .A.R	6.00	4.00	0.00	0.00				5.00	5.00		75.00	100.00	100.00	100.00	100.00		100.00
8	22019142009	GOKUL KRISHNAN. R	6.00	3.50	0.00	0.00				5.00	5.00		29.00	100.00	87.50	100.00	100.00		96.88
9	22019142010	MEENAKSHI. S	6.00	4.00	0.00	0.00				5.00	5.00		51.00	100.00	100.00	100.00	100.00		100.00
10	22019142011	MOHAMMED AJMAL.M.	4.50	4.00	0.00	0.00				5.00	5.00		28.00	75.00	100.00	100.00	100.00		93.75
11	22019142012	NANDANA UDAYAN	6.00	4.00	0.00	0.00				5.00	5.00		56.00	100.00	100.00	100.00	100.00		100.00
12	22019142013	R SREELEKSHMI	4.00	3.00	0.00	0.00				5.00	5.00		64.00	66.67	75.00	100.00	100.00		85.42
13	22019142015	SHAMNA. S	6.00	4.00	0.00	0.00				5.00	5.00		62.00	100.00	100.00	100.00	100.00		100.00
14	22019142016	SHARANYA B	6.00	4.00	0.00	0.00				5.00	5.00		47.00	100.00	100.00	100.00	100.00		100.00
15	22019142017	SULTHANA S	6.00	3.50	0.00	0.00				5.00	5.00		58.00	100.00	87.50	100.00	100.00		96.88
16	22019142018	SUSMITHA S	6.00	3.50	0.00	0.00				5.00	5.00		48.00	100.00	87.50	100.00	100.00		96.88
17	22019142019	A MUHAMMED AJMAL	6.00	4.00	0.00	0.00				5.00	5.00		62.00	100.00	100.00	100.00	100.00		100.00
18	22019142020	ALFI NAVAS	5.00	4.00	0.00	0.00				5.00	5.00		40.00	83.33	100.00	100.00	100.00		95.83
19	22019142021	AMAL SAJID	5.00	3.50	0.00	0.00				5.00	5.00		42.00	83.33	87.50	100.00	100.00		92.71
20	22019142022	AMRUTHA J	4.00	3.50	0.00	0.00				5.00	5.00		39.00	66.67	87.50	100.00	100.00		88.54
21	22019142023	ANJANA. S	5.50	3.00	0.00	0.00				5.00	5.00		33.00	91.67	75.00	100.00	100.00		91.67
22	22019142024	FAISAL	5.00	4.00	0.00	0.00				5.00	5.00		14.00	83.33	100.00	100.00	100.00		95.83
23	22019142025	GREESHMA RAMESH	5.00	3.00	0.00	0.00				5.00	5.00		AB	83.33	75.00	100.00	100.00		89.58
24	22019142026	HAREESH.H	6.00	4.00	0.00	0.00				5.00	5.00		58.00	100.00	100.00	100.00	100.00		100.00
25	22019142027	HAZEENA H	5.00	4.00	0.00	0.00				5.00	5.00		28.00	83.33	100.00	100.00	100.00		95.83
26	22019142028	JAMEEMA RAFEEK	6.00	4.00	0.00	0.00				5.00	5.00		32.00	100.00	100.00	100.00	100.00		100.00
27	22019142029	JINSHANA SHAJAHAN	5.00	4.00	0.00	0.00				5.00	5.00		28.00	83.33	100.00	100.00	100.00		95.83
28	22019142030	KAVYA MURALI	6.00	4.00	0.00	0.00				5.00	5.00		67.00	100.00	100.00	100.00	100.00		100.00
29	22019142031	MUBEENA.M	2.00	2.00	0.00	0.00				5.00	5.00		8.00	33.33	50.00	100.00	100.00		70.83
30	22019142032	MUKIL M	5.50	4.00	0.00	0.00				5.00	5.00		6.00	91.67	100.00	100.00	100.00		97.92
31	22019142033	NEHA SURESH	5.00	3.50	0.00	0.00				5.00	5.00		18.00	83.33	87.50	100.00	100.00		92.71
32	22019142034	REHANA.A.R	6.00	3.50	0.00	0.00				5.00	5.00		28.00	100.00	87.50	100.00	100.00		96.88
33	22019142035	SNEHA. N. KUMAR	5.00	4.00	0.00	0.00				5.00	5.00		50.00	83.33	100.00	100.00	100.00		95.83
34	22019142037	SREELEKSHMI.S	4.00	2.50	0.00	0.00				5.00	5.00		28.00	66.67	62.50	100.00	100.00		82.29
35	22019142038	THASLIYYA	5.00	4.00	0.00	0.00				5.00	5.00		67.00	83.33	100.00	100.00	100.00		95.83
36	22019142039	THEZNEEM SHAJAHAN	5.00	3.50	0.00	0.00				5.00	5.00		57.00	83.33	87.50	100.00	100.00		92.71
37	22019142040	VISHNU. S	5.00	4.00	0.00	0.00				5.00	5.00		47.00	83.33	100.00	100.00	100.00		95.83
38	22019142041	ASIF S	5.00	4.00	0.00	0.00				5.00	5.00		23.00	83.33	100.00	100.00	100.00		95.83
39	22019142042	FATHIMA N	5.00	4.00	0.00	0.00				5.00	5.00		33.00	83.33	100.00	100.00	100.00		95.83
40	22019142043	FATHIMA NIZAR	5.50	4.00	0.00	0.00				5.00	5.00		48.00	91.67	100.00	100.00	100.00		97.92
41	22019142044	FATHIMA. A	6.00	4.00	0.00	0.00				5.00	5.00		46.00	100.00	100.00	100.00	100.00		100.00
42	22019142045	FATHIMA.N	6.00	4.00	0.00	0.00				5.00	5.00		54.00	100.00	100.00	100.00	100.00		100.00
43	22019142046	FITHA NASSARUDEEN	6.00	3.50	0.00	0.00				5.00	5.00		54.00	100.00	87.50	100.00	100.00		96.88
44	22019142047	IRFAN N	5.00	4.00	0.00	0.00				5.00	5.00		28.00	83.33	100.00	100.00	100.00		95.83
45	22019142048	SABITHA SHAJI	5.00	4.00	0.00	0.00				5.00	5.00		53.00	83.33	100.00	100.00	100.00		95.83
46	22019142049	SHAHINA N	1.50	1.00	0.00	0.00				5.00	5.00		27.00	25.00	25.00	100.00	100.00		62.50

OVERALL ATTAINMENT			ATTAINMENT TABLE		CO1	CO2	CO3	CO4	CO5
1	Attainment through internal assessment:	3.00	ABSENTEE+NOT ATTEMPT	1	0	0	0	0	
2	Attainment through university examination:	1.11	PRESENT STUDENT OR ATTEMPT	45	46	46	46	46	
3	Weightage given to the Internal examination (20%):	0.60	NO. OF STUDENTS SECURE MARKS > THRESHOLD MARKS	23	41	43	46	46	
4	Weightage given to the university examination (80%):	0.89	% OF STUDENTS SECURE MARKS > THRESHOLD MARKS	51.11	89.13	93.48	100.00	100.00	
5	Final attainment level of the course (by Direct Assessment):	1.49	Attainment (3 ≥ 70%, 2 ≥60%, 1 ≥ 50%)	1.11	3.00	3.00	3.00	3.00	
			Final attainment level CO (by Direct Assessment):	1.49	1.49	1.49	1.49		