



AMBEDKAR COLLEGE OF ARTS & SCIENCE, WANDOOR
 (Aided by Govt. of Kerala & Affiliated to University of Calicut)
 Wandoor (PO), Pin 679328, Ph: 04931-249666
acaswandoor@gmail.com, Website: www.ambedkarcollegewdr.in

COURSE PLAN

Course code and title	CSC1FM105- DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS		
Class	BSC COMPUTER SCIENCE	Semester	ONE
Regulation	2024	Academic year	2024-25
Course prerequisites	- Basic understanding of computers - Familiarity with basic mathematical operations		
Course objectives	- This course provides a comprehensive introduction to Spreadsheets, focusing on understanding formulas, functions, data organization, analysis techniques, and data visualization. - Participants will gain skills in spreadsheet management, data cleansing, analysis, and visualization using Excel's various tools and features.		

COURSE OUTCOMES

At the end of the course the student would be able to...

CO1	Students will demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks. They will be able to effectively navigate Excel's interface and utilize toolbars.
CO2	Learners will understand the importance of data organization and cleansing in Excel. They will be able to import, export, filter, sort, validate, and remove duplicates from datasets. Students will develop skills to ensure data integrity and consistency, enhancing their ability to work with clean and organized data sets.
CO3	Participants will acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek. They will be able to apply various Excel functions and tools to perform complex calculations, analyze trends, and make informed decisions based on data analysis.
CO4	Students will gain proficiency in data visualization techniques using Excel. They will be able to create a variety of charts, design pivot charts, dashboards for effective data analysis. Additionally, learners will be able to implement form controls for interactive data manipulation in their visualizations.
CO5	Learners will develop skills in advanced features of Excel like macros, protect data sheets and workbooks, utilize split, freeze, and hide options effectively, incorporate add-ins for extended functionalities, and manage printing options in Excel for professional presentation of data.

MAPPING OF PROGRAM OUTCOMES

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	✓		✓	✓	✓			✓		
CO2	✓		✓	✓	✓			✓		



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CO3	✓		✓	✓	✓			✓		
CO4	✓		✓	✓	✓			✓		
CO5	✓		✓	✓	✓			✓		

PO1	Knowledge Acquisition					PO6	Ethics & Social Responsibility			
PO2	Communication & Leadership					PO7	Research, Innovation & Entrepreneurship			
PO3	Professional Skills					PO8	Lifelong Learning			
PO4	Digital Intelligence					PO9	Global Perspective			
PO5	Scientific awareness & Critical Thinking					PO10	Democratic Co-existence			

PROGRAM SPECIFIC OUTCOMES

PSO1	Understand the theoretical and mathematical foundations of Computer Science
PSO2	Understand the concepts of system architecture, hardware, software and network configuration
PSO3	Acquire logical thinking and problem-solving skills to find solutions in the software domain
PSO4	Design, analyze and develop code-based solutions for the algorithms
PSO5	Address the industry demands and assimilate technical, logical and ethical skills needed for the industry
PSO6	Adapt to emerging trends and tackle the challenges in the software field.



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MAPPING OF COURSE OUTCOMES TO PROGRAM EDUCATIONAL OUTCOMES					
PROGRAM EDUCATIONAL OUTCOMES	COURSE OUTCOMES				
	CO1	CO2	CO3	CO4	CO5
PEO1: Development of Leadership Qualities. Graduates will demonstrate Leadership qualities by utilizing their full intellectual potential, engaging with their communities, and contributing to the social, cultural, and economic development of society.					
PEO2: Lifelong Learning and Societal Contribution. Graduates will be equipped with core values and intellectual capabilities enabling them to pursue lifelong learning and meaningfully contribute to societal well-being through innovative thinking and service.	✓	✓	✓	✓	✓
PEO3: Entrepreneurial and Global Competence. Graduates will possess entrepreneurial skills and a global perspective, promoting sustainable national growth through ethical leadership, innovative ventures, and responsible citizenship.	✓	✓	✓		

REFERENCES:

1. "Excel 2019 Bible" by Michael Alexander and Richard Kusleika
2. "Excel Formulas & Functions For Dummies" by Ken Bluttman and Peter Aitken
3. "Excel with Microsoft Excel: Comprehensive & Easy Guide to Learn Advanced MS Excel" by Naveen Mishra

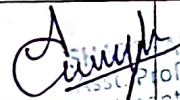
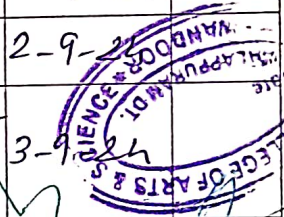
e-learning resources	https://www.excel-easy.com/ https://www.youtube.com/channel/UCJtUOos_MwJa_Ewii-R3cJA
Mode of Evaluation	Internal Examination (30%) End Semester Examination (70%)
Faculty	Jasmine MT, Assistant Professor/ Department of Computer Science
e-mail id	Jasminefasil123@gmail.com



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COURSE PLAN

CSC1FM105- DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS

No of lecture hours	Planned Date	Topics to be covered			Reference/ Teaching aids and methods	Actual date	Week ly review
MODULE I - Introduction to Excel & Understanding Formulas, Functions							
1	19-07-2024	Features of Spreadsheet			PPT/WB	19-7-24	
2	22-07-2024	Parts of Excel Window, Tool bars			PPT/WB	5-8-24	
3	23-07-2024	Work sheet and Work book, Insertion and Deletion of cells, columns, rows			T/WB	9-8-24	
4	26-07-2024	Formatting in Excel ,Merge, Warp			T/PPT	19-8-24	
5	29-07-2024	Font Formatting, Number Formatting, Borders and Shading, Colouring			T/PPT	23-8-24	
6	30-07-2024	Range, Autofill, Autosum, Relative, Absolute and Mixed Referencing in Excel			T/PPT	30-8-24	
7	02-08-2024	Linking data between worksheets			T/PPT	2-9-24	
8	05-08-2024	Formulas and Functions in Excel: Use of Formula Bar			T/WB	2-9-24	
9	06-08-2024	Functions: SUM,ROUND, CEIL, FLOOR,IF, AND, OR,AVERAGE, MIN, MAX ,COUNT, COUNTIF, SUMIF, VLOOKUP,HLOOKUP			WB/PPT	3-9-24	
Planned hours	Actual hours	Date	Sign of Faculty	Review by HoD	Review by Principal		
9	8	3-9-24			 In charge of Mathematics Ambedkar College of Arts & Science Wandoor		
MODULE II - Cleansing and Organising Data in Excel							
10	09-08-2024	Importance of Data Cleansing and Organisation			PPT/WB	6-9-24	
11	12-08-2024	Data Import and Export			PPT/WB	9-9-24	
12	13-08-2024	Data Import and Export			PPT/WB	9-9-24	
13	16-08-2024	Filtering and Sorting			WB/PPT	10-9-24	
14	19-08-2024	Filtering and Sorting			WB/PPT	10-9-24	
15	23-08-2024	Data Validation and remove Duplicates			WB/PPT	23-9-24	
16	27-08-2024	Group, Ungroup			WB/PPT	23-9-24	
17	30-08-2024	Subtotal			T/PPT	24-9-24	
18	02-09-2024	Conditional Formatting – Highlight Cell Rules, Top/Bottom Rules			T/PPT	27-9-24	



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Planned hours	Actual hours	Date	Sign of Faculty	Review by HoD	Review by Principal
9	7	27-9-24			
MODULE III - Advanced Techniques for Data Analysis					
19	03-09-2024	Features of Pivot table			PPT/WB 30-9-24
20	06-09-2024	Pivot Table creation			PPT/WB 30-9-24
21	09-09-2024	Pivot Table creation			PPT/WB 1-10-24
22	10-09-2024	What-if Analysis			PPT/WB 5-10-24
23	23-09-2024	What-if Analysis			PPT/WB 4-10-24
24	24-09-2024	Goal Seek			PPT/WB 7-10-24
25	27-09-2024	Goal Seek			PPT/WB 7-10-24
26	30-09-2024	Watch Window			PPT/WB 8-10-24
Planned hours	Actual hours	Date	Sign of Faculty	Review by HoD	Review by Principal
8	6	8-10-24			
MODULE IV - Data Visualisation Techniques					
27	01-10-2024	Creating Charts			WB/PPT 14-10-24
28	04-10-2024	Different types of charts			WB/PPT 14-10-24
29	07-10-2024	Formatting Chart Objects, Changing the Chart Type			WB/PPT 15-10-24
30	08-10-2024	Showing and Hiding the Legend, Showing and Hiding the Data Table			WB/PPT 18-10-24
31	11-10-2024	Pivot Chart			WB/PPT 21-10-24
32	14-10-2024	Pivot Chart			PPT 21-10-24
33	15-10-2024	Dashboards			PPT 22-10-24
34	18-10-2024	Form Controls			PPT/T 26-10-24
35	21-10-2024	Form Controls			PPT/T 26-10-24
36	22-10-2024	Form Controls			PPT/T 25-10-24
Planned hours	Actual hours	Date	Sign of Faculty	Review by HoD	Review by Principal
10	7	25-10-24			

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MODULE V - Open Ended Module: More about Excel

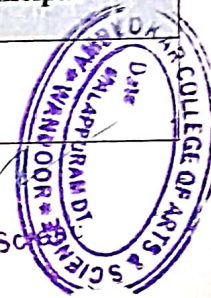
37	25-10-2024	Recording and Running Macros			PPT	26/10/24
38	28-10-2024	Recording and Running Macros			PPT	26/10/24
39	29-10-2024	Protecting Data Sheets and Workbooks			PPT/T	26/10/24
40	01-11-2024	Protecting Data Sheets and Workbooks			PPT/T	28/10/24
41	04-11-2024	Split, Freeze and Hide options			PPT/T	29/10/24
42	05-11-2024	Add-ins			PPT/WG	2/11/24
43	08-11-2024	Add-ins			PPT/WG	2/11/24
44	11-11-2024	Add-ins			PPT/WG	4/11/24
45	12-11-2024	Printing options in Excel			PPT	5/11/24
Planned hours	Actual hours	Date	Sign of Faculty	Review by HoD	Review by Principal	
9	7	5-11-24				

FACULTY

HOD

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Department of Mathematics
Ambedkar College of Arts & Science
Wandoor, Malappuram Dt.

Asst. Professor & Head
In charge of Principal
Ambedkar College of Arts & Science
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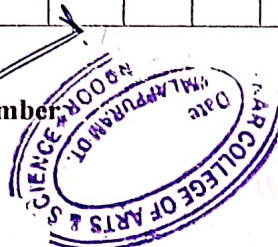
Course outcome –Program outcome Mapping Table

CSC1MN102- PYTHON PROGRAMMING	Cognitive level	Program outcomes									
		1- Low Correlation 2- Moderate Correlation 3- High correlation									
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
DIRECT METHOD											
CO1	Rememb er	3		2	3	2			2		
CO2	Apply	3		3	2	3			2		
CO3	Apply & Analyze	3		2	2	3			2		
CO4	Create	3		3	3	2			1		
CO5	Innovate	3		2	2	2			1		
INDIRECT METHOD											
Class Room contests	Analyze & Create	3		2	3	2			1		

Course Faculty

[Signature]

IQAC Member



HoD

[Signature]

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COURSE PRE-ANALYSIS

Dear Students,

Welcome back to class, I would like to thank all of you for sparing your time in filling up this Course Pre-Analysis survey for the effective conduct of Computer Aided Design and Manufacturing Course. As you know that this survey is meant for knowing the knowledge level of the students with respect to this course, please fill it very carefully. At this juncture, I am glad to welcome the suggestions from you all (if any).

Rate your prior knowledge about the topics mentioned below

Course Outcomes	Description	Rate your prior knowledge about the topics			
		Excellent (4)	Good (3)	Moderate (2)	Fair (1)
CO1	Students will demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks. They will be able to effectively navigate Excel's interface and utilize toolbars.				✓
CO2	Learners will understand the importance of data organization and cleansing in Excel. They will be able to import, export, filter, sort, validate, and remove duplicates from datasets. Students will develop skills to ensure data integrity and consistency, enhancing their ability to work with clean and organized data sets.				✓
CO3	Participants will acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek. They will be able to apply various Excel functions and tools to perform complex calculations, analyze trends, and make informed decisions based on data analysis.				✓
CO4	Students will gain proficiency in data visualization techniques using Excel. They will be able to create a variety of charts, design pivot charts, dashboards for effective data analysis. Additionally, learners will be able to implement form controls for interactive data manipulation in their visualizations.				✓
CO5	Learners will develop skills in advanced features of Excel like macros, protect data sheets and workbooks, utilize split, freeze, and hide options effectively, incorporate add-ins for extended functionalities, and manage printing options in Excel for professional presentation of data.				✓

Name of the student: Anusree . CT

Signature of the student



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Syllabus

Module	Unit	Content	Hrs (36+9)	Marks (50)
I	Introduction to Excel & Understanding Formulas, Functions		9	15
	1	Features of Spreadsheet	1	
	2	Parts of Excel Window, Tool bars, Work sheet and Work book, Insertion and Deletion of cells, columns, rows	2	
	3	Formatting in Excel (Merge, Warp, Font Formatting, Number Formatting, Borders and Shading, Colouring)	2	
	4	Range, Autofill, Autosum, Relative, Absolute and Mixed Referencing in Excel, Linking data between worksheets	2	
	5	Formulas and Functions in Excel: Use of Formula Bar, Functions: SUM, ROUND, CEIL, FLOOR, IF, AND, OR, AVERAGE, MIN, MAX, COUNT, COUNTIF, SUMIF, VLOOKUP, HLOOKUP	2	
II	Introduction to Excel & Understanding Formulas, Functions		9	15
	6	Importance of Data Cleansing and Organisation	1	
	7	Data Import and Export	2	
	8	Filtering and Sorting	2	
	9	Data Validation and remove Duplicates	1	
	10	Group, Ungroup, Subtotal	2	
	11	Conditional Formatting – Highlight Cell Rules, Top/Bottom Rules	1	
	Advanced Techniques for Data Analysis		8	10
	12	Features of Pivot table		



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III	13	Pivot Table creation		
	14	What-if Analysis		
	15	Goal Seek		
	16	Watch Window		
	Data Visualisation Techniques		10	15
IV	17	Creating Charts, Different types of charts	2	
	18	Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table	2	
	19	Pivot Chart	2	
	20	Dashboards	1	
	21	Form Controls	3	
	Open Ended Module: More about Excel		9	



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V	1. Recording and Running Macros 2. Protecting Data Sheets and Workbooks 3. Split, Freeze and Hide options 4. Add-ins 5. Printing options in Excel
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References

1. "Excel 2019 Bible" by Michael Alexander and Richard Kusleika
2. "Excel Formulas & Functions For Dummies" by Ken Bluttman and Peter Aitken
3. "Excel with Microsoft Excel: Comprehensive & Easy Guide to Learn Advanced MS Excel" by Naveen Mishra

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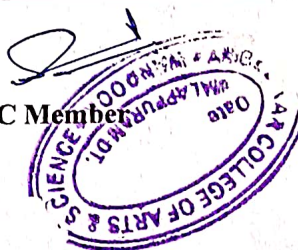
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Course outcome –Program Specific outcome Mapping Table

Course outcomes	Program Specific outcomes					
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	✓	✓	✓		✓	✓
CO2	✓	✓	✓		✓	✓
CO3	✓	✓	✓		✓	✓
CO4	✓	✓	✓		✓	✓
CO5	✓	✓	✓		✓	✓

Course Faculty

IQAC Member



HoD

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DIRECT ASSESSMENT OF COURSE OUTCOMES

INTERNAL ASSESSMENT TEST 25 MARKS				
Objective	To identify What Students Have Learned and also to identify students strength and weakness			
To file	Answer scripts	Frequency	1 time in a semester on dates specified by University	
Format	-			
Evaluation	Based on answer given in the scripts			
ASSIGNMENT: 5 MARKS				
Objective	To enhance students understanding of a complex structural problems			
Product	Hand written assignment sheets			
Frequency	Semester			
Format	-			
Evaluation	Based on rubrics			
Criteria	No. of assignments: 1, Submit on or before the date of submission			
END SEMESTER EXAMINATION 100 MARKS (Reduced to 50 Marks)				
Objective	To assess the each student's knowledge of the course			
Product	Result analysis			
Frequency	Semester			
Format	Part -A 10 x 2 =16 marks, Part -B 5 x 6 = 24 marks, 1 x 10 = 10 marks Total marks = 50, Duration : 1.5hours			
Evaluation	Based on answer given in the scripts			
Marks out of 100	30-50	50- 70	71-100	0-50
Levels of attainment	1	2	3	Counseling / Coaching classes.



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COURSE EXIT SURVEY

Dear Students,

We are seeking valuable feedback from you, to improve upon the course contents, coverage, methods of instruction and teaching learning methods of the course you have learned for the semester; kindly rate the process of delivering the syllabus from 1 – 5 scale (5 Excellent, 4-Very good, 3-Good 2-Average, 1-Below average)

Name		Anusree . CT		Reg No		VF0YJmT004	
Course Code		CSC1FM105	Name of Course		DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS		
Dept		COMPUTER SCIENCE	Semester		I	Date 12-11-24	
Sl No	Questioners	1	2	3	4	5	
1.	Quality of the Course content				✓		
2.	Suitability of Contents beyond syllabus topics				✓		
3.	Relevance of the text& Reference books suggested			✓			
4.	Support of Library for the Course contents				✓		
5.	Course delivery methods by teacher				✓		
6.	Use of ICT tools in class				✓		
7.	Relevance of Syllabus topics for your placement			✓			
8.	Usefulness of the topics for life			✓	✓		
9.	Content stimulates intellectually				✓		
10.	Fairness of the internal evaluation system				✓		
11.	Assignments, competitive evaluation methods				✓		
12.	Topics covered supported by online resources & LMS				✓		
I am able to achieve the following (Relating to Course outcomes)							
CO1	Students will demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks. They will be able to effectively navigate Excel's interface and utilize toolbars.				✓		
CO2	Learners will understand the importance of data organization and cleansing in Excel. They will be able to import, export, filter, sort, validate, and remove duplicates from datasets. Students will develop skills to				✓		

Signature of the Student

Anusree

Class Advisor

Anusree

HoD

Sharshad

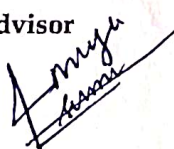
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	ensure data integrity and consistency, enhancing their ability to work with clean and organized data sets.			✓		
CO3	Participants will acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek. They will be able to apply various Excel functions and tools to perform complex calculations, analyze trends, and make informed decisions based on data analysis.			✓		
CO4	Students will gain proficiency in data visualization techniques using Excel. They will be able to create a variety of charts, design pivot charts, dashboards for effective data analysis. Additionally, learners will be able to implement form controls for interactive data manipulation in their visualizations.			✓		
CO5	Learners will develop skills in advanced features of Excel like macros, protect data sheets and workbooks, utilize split, freeze, and hide options effectively, incorporate add-ins for extended functionalities, and manage printing options in Excel for professional presentation of data.			✓		
Inclusions Suggestions for Deletion of topics						

Signature of the Student



Class Advisor



HoD



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 Vijaydurg, Mulappuram Dt.

Attainment Levels of COs

Course Name: CSC1FM105-DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS				
Assessment Methods		Target-Attainment Levels		Attainment
Internal Assessment	Level 1	50% of students scoring more than 35% marks in internal assessment tools		LEVEL 03
	Level 2	60% of students scoring more than 35% marks in internal assessment tools		
	Level 3	70% of students scoring more than 35% marks in internal assessment tools		
Assessment Methods		Target-Attainment Levels		Attainment
University Assessment	Level 1	50% of students scoring more than 35% marks in UE assessment tools		LEVEL 03
	Level 2	60% of students scoring more than 35% marks in UE assessment tools		
	Level 3	70% of students scoring more than 35% marks in UE assessment tools		



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DEPARTMENT OF MATHEMATICS

CO ATTAINMENT - IA TEST MARKS (ODD SEM. 2024-2025)

Semester: I

**Course: CSC1FM105-DATA ANALYSIS AND VISUALISATION
THROUGH SPREAD SHEETS**

Name of the faculty member: JASMINE MT

Sl. No.	Name of the student	REG NO	IA TEST	COURSE OUTCOMES	
			Q1 TO Q14	IA TEST	
			CO1 TO CO5	CO1 TO CO5	
		Max. Marks	25	%age	Y/N
1	ADITHYA U	UFAYSMT001	23	92	Y
2	ANUSREE C T	UFAYSMT004	10	40	Y
3	AYISHA NAHRIN CP	UFAYSMT005	25	100	Y
4	FIDA MK	UFAYSMT007	10	40	Y
5	HIBA K T	UFAYSMT008	10	40	Y
6	MAJIDA SHERIN K K	UFAYSMT010	10	40	Y
7	MUHAMMED FAHIZ T P	UFAYSMT012	10	40	Y
8	NAJA NASRIN . P	UFAYSMT014	8	32	N
9	RABIYATHUL ADHBIYYA	UFAYSMT016	19	76	Y
10	RIFANA K	UFAYSMT017	4	16	N
11	RIHANA K	UFAYSMT018	13	52	Y
12	SHAHANA T P	UFAYSMT019	6	24	N
13	SHIBIYA JEBIN T H	UFAYSMT020	17	68	Y
14	SULAIKHA FAHMA P	UFAYSMT021	19	76	Y
15	ANSHA P	UFAYBCM006	17	68	Y
16	ASHIFA . P	UFAYBCM010	21	84	Y
17	ASHIQA. P	UFAYBCM012	21	84	Y
18	DEVITHEERTHA P K	UFAYBCM017	23	92	Y
19	FATHIMA DIYA P	UFAYBCM019	25	100	Y
20	FATHIMA SHAHANA P K	UFAYBCM023	21	84	Y
21	HENNA. K	UFAYBCM024	25	100	Y
22	JISMI . K	UFAYBCM027	17	68	Y
23	MUHAMMED SHAHEEN P	UFAYBCM035	23	92	Y
24	MUHAMMED SINAN. P	UFAYBCM036	4	16	N



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DEPARTMENT OF MATHEMATICS

25	NAJA RAHMA V P	UFAYBCM037	23	92	Y
26	RANHA P	UFAYBCM042	25	100	Y
27	SAHALA . K	UFAYBCM044	19	76	Y
28	SAHANA . K	UFAYBCM045	21	84	Y
29	SREENATH P	UFAYBCM057	13	52	Y
30	FATHIMA HIBA K	UFAYAEG020	21	84	Y
31	HESNA NAZRIN. K. P	UFAYAEG028	19	76	Y
32	DIYA VP	UFAYAEC014	13	52	Y
				28	
				87.50	
				CO1 to CO5	
TARGET: 50% OF STUDENTS WILL SCORE 35% OF MARKS			87.5		



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DEPARTMENT OF MATHEMATICS

CO ATTAINMENT - ASSIGNMENT(ODD SEM. 2024-2025)

Semester: I

Code: CSC1FM105-DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEET

Name of the faculty member:

JASMINE MT

Sl. No.	Name of the student	REG NO	ASSIGNMENT	VIVA	COURSE OUTCOMES			
			CO1 to CO5	CO1 to CO5	CO1 - CO5		CO1 -CO5	
Max. Marks			5	8	%age	Y/N	%age	Y/N
1	ADITHYA U	UFAYSMT001	5	8	100	Y	100	Y
2	ANUSREE C T	UFAYSMT004	5	6	100	Y	75	Y
3	AYISHA NAHRIN CP	UFAYSMT005	5	8	100	Y	100	Y
4	FIDA MK	UFAYSMT007	5	8	100	Y	100	Y
5	HIBA K T	UFAYSMT008	5	4	100	Y	50	Y
6	MAJIDA SHERIN K K	UFAYSMT010	5	8	100	Y	100	Y
7	MUHAMMED FAHIZ T P	UFAYSMT012	5	8	100	Y	100	Y
8	NAJA NASRIN . P	UFAYSMT014	5	7	100	Y	87.5	Y
9	RABIYATHUL ADHBIYYA	UFAYSMT016	5	2	100	Y	25	N
10	RIFANA K	UFAYSMT017	5	8	100	Y	100	Y
11	RIHANA K	UFAYSMT018	5	8	100	Y	100	Y
12	SHAHANA T P	UFAYSMT019	5	4	100	Y	50	Y
13	SHIBIYA JEBIN T H	UFAYSMT020	5	8	100	Y	100	Y
14	SULAIKHA FAHMA P	UFAYSMT021	5	8	100	Y	100	Y
15	ANSHA P	UFAYBCM006	5	7	100	Y	87.5	Y
16	ASHIFA . P	UFAYBCM010	5	8	100	Y	100	Y

17	ASHIQA. P	UFAYBCM012	5	8	100	Y	100	Y
18	DEVITHEERTHA P K	UFAYBCM017	5	8	100	Y	100	Y
19	FATHIMA DIYA P	UFAYBCM019	5	8	100	Y	100	Y
20	FATHIMA SHAHANA P K	UFAYBCM023	5	8	100	Y	100	Y
21	HENNA. K	UFAYBCM024	5	8	100	Y	100	Y
22	JISMI . K	UFAYBCM027	5	7	100	Y	87.5	Y
23	MUHAMMED SHAHEEN P	UFAYBCM035	5	8	100	Y	100	Y
24	MUHAMMED SINAN. P	UFAYBCM036	5	2	100	Y	25	N
25	NAJA RAHMA V P	UFAYBCM037	5	8	100	Y	100	Y
26	RANHA P	UFAYBCM042	5	8	100	Y	100	Y
27	SAHALA . K	UFAYBCM044	5	6	100	Y	75	Y
28	SAHANA . K	UFAYBCM045	5	6	100	Y	75	Y
29	SREENATH P	UFAYBCM057	5	8	100	Y	100	Y
30	FATHIMA HIBA K	UFAYAEG020	5	8	100	Y	100	Y
31	HESNA NAZRIN. K. P	UFAYAEG028	5	8	100	Y	100	Y
32	DIYA VP	UFAYAEC014	5	6	100	Y	75	Y
					32		30	
					100.00		93.75	

FOR LAL (CSC1FM105)	CO1 TO 5	CO1 TO 5
	100.00	93.75

TARGET: 1) 90% OF STUDENTS WILL SCORE 35% OF MARKS IN
ASSIGNMENT



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DEPARTMENT OF MATHEMATICS

CO ATTAINMENT - FINAL EXAM MARKS (EVEN SEM , 2024-2025)

Semester: I

Course: CSC1FM105-DATA ANALYSIS AND VISUALISATION
THROUGH SPREAD SHEETS

Sl. No.	Name of the student	REG NO	COURSE OUTCOMES	CO ATTAINMENT	
			CO 1 TO CO5	CO 1 TO CO5	
		Max. Marks	60	%age	Y/N
1	ADITHYA U	UFAYSMT001	34	88	Y
2	ANUSREE C T	UFAYSMT004	15	30	N
3	AYISHA NAHRIN CP	UFAYSMT005	41	82	Y
4	FIDA MK	UFAYSMT007	25	50	Y
5	HIBA K T	UFAYSMT008	21	42	Y
6	MAJIDA SHERIN K K	UFAYSMT010	13	28	N
7	MUHAMMED FAHIZ T P	UFAYSMT012	20	40	Y
8	NAJA NASRIN . P	UFAYSMT014	22	44	Y
9	RABIYATHUL ADHBIYYA	UFAYSMT016	37	74	Y
10	RIFANA K	UFAYSMT017	24	48	Y
11	RIHANA K	UFAYSMT018	19	38	Y
12	SHAHANA T P	UFAYSMT019	19	38	Y
13	SHIBIYA JEBIN T H	UFAYSMT020	39	78	Y
14	SULAIKHA FAHMA P	UFAYSMT021	28	56	Y
15	ANSHA P	UFAYBCM006	32	64	Y
16	ASHIFA . P	UFAYBCM010	48	96	Y
17	ASHIQA. P	UFAYBCM012	43	86	Y
18	DEVITHEERTHA P K	UFAYBCM017	32	64	Y
19	FATHIMA DIYA P	UFAYBCM019	41	82	Y
20	FATHIMA SHAHANA P K	UFAYBCM023	36	72	Y
21	HENNA. K	UFAYBCM024	34	68	Y
22	JISMI . K	UFAYBCM027	29	58	Y
23	MUHAMMED SHAHEEN P	UFAYBCM035	38	76	Y
24	MUHAMMED SINAN. P	UFAYBCM036	20	40	Y
25	NAJA RAHMA V P	UFAYBCM037	45	90	Y
26	RANHA P	UFAYBCM042	45	90	Y
27	SAHALA . K	UFAYBCM044	31	62	Y
28	SAHANA . K	UFAYBCM045	30	60	Y
29	SREENATH P	UFAYBCM057	35	70	Y
30	FATHIMA HIBA K	UFAYAEG020	39	78	Y

31	HESNA NAZRIN. K. P	UFAYAEG028	40	80	Y
32	DIYA VP	UFAYAEC014	19	38	Y
				30	
				93.75	
		FOR L&L (CSC1FM105)	CO1 to CO5		
			93.75		
		TARGET: 75% OF STUDENTS WILL SCORE 35% OF MARKS			



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DEPARTMENT OF MATHEMATICS

DIRECT ASSESSMENT METHOD - CO ATTAINMENT (EVEN SEM . 2024-2025)

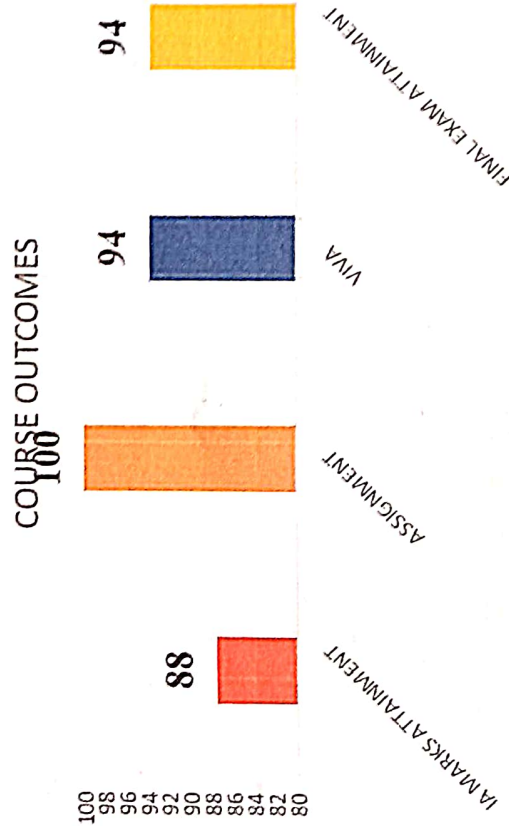
Semester: I

Course: CSC1FM105-DATA ANALYSIS AND
VISUALISATION THROUGH SPREAD SHEETS

Name of the faculty member: JASMINE MT

TARGET: 60% ATTAINMENT

COs	CO1 to CO5
IA MARKS ATTAINMENT	88
ASSIGNMENT	100
VIVA	94
FINAL EXAM ATTAINMENT	94
AVERAGE	94





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DEPARTMENT OF MATHEMATICS

COURSE EXIT SURVEY RESPONSES (EVEN SEM : 2023-2024)

Course: CSC1FM105-DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS

Semester: I

Name of the faculty member: JASMINE MT

Sl. No.	NAME OF THE STUDENT	REG NO	Are you able to demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks.	Are you able to understand the importance of data organization and cleansing in Excel	Are you able to acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek	Are you able to	Are you able to develop skills in advanced features of Excel like macros, protect data sheets and workbooks, utilize split, freeze, and hide options effectively
COURSE OUTCOMES							
			CO1	CO2	CO3	CO4	CO5
1	ADITHYA U	UFAYSMT001	4 (Very Good)	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)
2	ANUSREE C T	UFAYSMT004	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)
3	AYISHA NAHRIN CP	UFAYSMT005	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
4	FIDA MK	UFAYSMT007	5 (EXCELLENT)	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)
5	HIBA K T	UFAYSMT008	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)	3 (Good)
6	MAJIDA SHERIN K K	UFAYSMT010	4 (Very Good)	4 (Very Good)	4 (Very Good)	4 (Very Good)	4 (Very Good)
7	MUHAMMED FAHIZ T P	UFAYSMT012	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)	3 (Good)
8	NAJA NASRIN . P	UFAYSMT014	5 (EXCELLENT)	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)
9	RABIYATHUL ADHBIYYA	UFAYSMT016	4 (Very Good)	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)
10	RIFANA K	UFAYSMT017	4 (Very Good)	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)
11	RIHANA K	UFAYSMT018	4 (Very Good)	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)

12	SHAHANA T P	UFAYSMT019	4 (Very Good)	4 (Very Good)	3 (Good)	4 (Very Good)	4 (Very Good)
13	SHIBIYA JEBIN T H	UFAYSMT020	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)	4 (Very Good)
14	SULAIKHA FAHMA P	UFAYSMT021	5 (EXCELLENT)	4 (Very Good)	5 (EXCELLENT)	5 (EXCELLENT)	4 (Very Good)
15	ANSHA P	UFAYBCM006	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
16	ASHIFA . P	UFAYBCM010	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)	5 (EXCELLENT)	5 (EXCELLENT)
17	ASHIQA . P	UFAYBCM012	4 (Very Good)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
18	DEVITHEERTHA P K	UFAYBCM017	5 (EXCELLENT)	4 (Very Good)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
19	FATHIMA DIYA P	UFAYBCM019	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
20	FATHIMA SHAHANA P K	UFAYBCM023	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	4 (Very Good)
21	HENNA . K	UFAYBCM024	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)	4 (Very Good)
22	JISMI . K	UFAYBCM027	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)
23	MUHAMMED SHAHEEN P	UFAYBCM035	4 (Very Good)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	4 (Very Good)
24	MUHAMMED SINAN . P	UFAYBCM036	3 (Good)	3 (Good)	2 (Very Fair)	2 (Very Fair)	2 (Very Fair)
25	NAJA RAHMA V P	UFAYBCM037	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)	5 (EXCELLENT)
26	RANHA P	UFAYBCM042	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)	5 (EXCELLENT)	4 (Very Good)
27	SAHALA . K	UFAYBCM044	4 (Very Good)	4 (Very Good)	3 (Good)	3 (Good)	4 (Very Good)
28	SAHANA . K	UFAYBCM045	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)	5 (EXCELLENT)
29	SREENATH P	UFAYBCM057	5 (EXCELLENT)	4 (Very Good)	4 (Very Good)	4 (Very Good)	3 (Good)
30	FATHIMA HIBA K	UFAYAEG020	4 (Very Good)	4 (Very Good)	3 (Good)	3 (Good)	3 (Good)
31	HESNA NAZRIN . K . P	UFAYAEG028	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)	5 (EXCELLENT)
32	DIYA VP	UFAYAEC014	4 (Very Good)	3 (Good)	3 (Good)	3 (Good)	3 (Good)
		No. of graded "0"	0	0	0	0	0
		No. of graded "1"	0	0	0	0	0
		No. of graded "2"	0	0	0	1	0
		No. of graded "3"	1	5	5	7	9
		No. of graded "4"	16	19	18	14	17
		No. of graded "5"	15	11	11	10	9



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DEPARTMENT OF MATHEMATICS

COURSE EXIT SURVEY RESPONSES (EVEN SEM . 2024-2025)

Name of the faculty member: JASMINE MT		Course: CSCC1FM105-DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS									
CO No.	CO description	Course Exit Survey Questions	No. of students given the ratings					Total Responses	Weighted Average	CO Max. Count	%age CO attainment
			0	1	2	3	4				
CO1	Students will demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks. They will be able to effectively navigate Excel's interface and utilize toolbars.	Are you able to demonstrate proficiency in managing spreadsheets, including creating, formatting, and manipulating data within Excel workbooks. They will be able to effectively navigate Excel's interface and utilize toolbars.	0	0	0	1	16	15	32	5	74.74
CO2	Learners will understand the importance of data organization and cleansing in Excel. They will be able to import, export, filter, sort, validate, and remove duplicates from datasets. Students will develop skills to ensure data integrity and consistency, enhancing their ability to work with clean and organized data sets.	Are you able to understand the importance of data organization and cleansing in Excel	0	0	0	5	19	11	35	5	76.84
CO3	Participants will acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek. They will be able to apply various Excel functions and tools to perform complex calculations, analyze trends, and make informed decisions based on data analysis.	Are you able to acquire advanced data analysis skills like pivot tables, what-if analysis, and goal seek	0	0	0	5	18	11	34	5	74.74
CO4	Students will gain proficiency in data visualization techniques using Excel. They will be able to create a variety of charts, design pivot charts, dashboards for effective data analysis. Additionally, learners will be able to implement form controls for interactive data manipulation in their visualizations.	Are you able to Analyze the various data structures and operations on it using Python	0	0	1	7	14	10	32	5	67.89

CO5	Learners will develop skills in advanced features of Excel like macros, protect data sheets and workbooks, utilize split, freeze, and hide options effectively, incorporate add-ins for extended functionalities, and manage printing options in Excel for professional presentation of data.	0	0	0	9	17	9	35	3.68	5	73.68
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CO Assessment method	CO1	CO2	CO3	CO4	CO5
Direct method (IA Test, Assignment/quiz and exam)	94	94	94	94	94
Weightage (80%)	75	75	75	75	75
Indirect method (Course Ext Survey)	74.74	76.84	74.74	67.89	73.68
Weightage (20%)	14.95	15.37	14.95	13.58	14.74
Final CO Attainment	89.95	90.37	89.95	88.58	89.74





CO-PO-PSO MAPPING (EVEN SEM . 2023-2024)

Course:CSC1FM105-DATA ANALYSIS AND VISUALISATION THROUGH SPREAD SHEETS

(I) CO Attainment

A: Direct assessment (80%)-Tests, Assignment, Examination

B: Indirect assessment (20%)-Course end survey

COs	Mapping of POs	Mapping of PSOs	Direct Assessment	Indirect Assessment	Overall Attainment	Target (%)	Attainment
			(a)	(b)	0.8 (a) + 0.2(b)		
CO1	PO1PO3,PO4,PO5 & PO8	PSO1,PSO2, PSO3,PSO5 & PSO6	94	74.74	90	75	YES
CO2	PO1PO3,PO4,PO5 & PO8	PSO1,PSO2, PSO3,PSO5 & PSO6	94	76.84	90		
CO3	PO1PO3,PO4,PO5 & PO8	PSO1,PSO2, PSO3,PSO5 & PSO6	94	74.74	90		
CO4	PO1PO3,PO4,PO5 & PO8	PSO1,PSO2, PSO3,PSO5 & PSO6	94	67.89	89		
CO5	PO1PO3,PO4,PO5 & PO8	PSO1,PSO2, PSO3,PSO5 & PSO6	94	73.68	90		

HOD

SHARSHAD AMEERA.U

Asst. Professor & Head

Department of Mathematics

Department of
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Wandoor, Malappuram Dt.

PRINCIPAL

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In charge of Principal
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