## **Lecture Plan**

Name of the College: Government College of Arts, Science and Commerce. Sanquelim - Goa

Name of Faculty: Ms. Sonali Surya Naik

Subject: Economics

Paper code: Decision Making with

Spreadsheet-I, ECO 221 Program: B.A. Arts Division:

Academic year: 2024-2025 Semester: IV Total Lectures:25

Course Objectives: The objectives of the course is to introduce the students with decision making tools using spreadsheet.

Course Outcome: Students will be able to

1. Familarize with multiple spreadsheet commands for general day to day use.

2.Apply spreadsheet commands and functions in decision making.

3.Use a spreadsheet solver for optimisation problems.

4. Use advanced spreadsheet techniques for multiproblem solutions.

## **Student Learning Outcome: Upon completing this course, students will be able to:**

- 1. Apply spreadsheet tools for decision making.
- 2. Analyse data using various functions.
- 3. Evaluate investments using financial functions.
- 4. Conduct sensitivity analysis and scenario planning.
- 5. Optimize decisions using solver.
- 6. Develop advanced spreadsheet skills.
- 7. Apply decision analysis techniques to real world problems.

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Month	Lecture From	Lecture To	No. of lectu res allot ted	Topic, Subtopic to be covered	Exercise/ Assignme nt	ICT Tools	Reference books
December 2024	9/12/2024	14/12/2024	02	UNIT 1 Range Names	Exercises on Range Names and Lookup	SmartScreen, Greenboard , PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3 <sup>rd</sup> ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision
				Lookup Functions	functions.		making, by David Anderson, Dennis J. Sweeney Thomas.
				Index function	Assignme nts topics related to index and	SmartScreen, Greenboard	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3 <sup>rd</sup> ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision
December 2024	16/12/2024	21/12/2024	02	Match Function	match functions.	, PowerPoint.	making, by David Anderson, Dennis J. Sweeney Thomas.
January 2025	2/01/2025	4/01/2025	02	Text Function  Dates and Date functions	Assignme nts topic related to date and dates functions.	SmartScreen, Greenboard , PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3 <sup>rd</sup> ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
January	6/01/2025	11/01/2025	UZ	Evaluating investments by using Net Present value criteria	Exercises on evaluatin g investme nts by using NPV	SmartScreen, Greenboard	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3 <sup>rd</sup> ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J.
2025			02	returns	and IRR	PowerPoint.	Sweeney Thomas.

	13/01/2025	18/01/2025		More functional			Winston, W, Microsoft Excel 2010: Data
				functions	Exercises		Analysis and Business Modelling, 3 <sup>rd</sup>
					and		ed,2011. Redmond, WA: Microsoft Press.
					examples	SmartScreen,	Introduction to Management Science:
					on .	Greenboard	Quantitative approaches to Decision
January				More functional	functional	,	making, by David Anderson, Dennis J.
2025			02	functions	functions	PowerPoint.	Sweeney Thomas.
	20/01/2025	25/01/2025					Winston, W, Microsoft Excel 2010: Data
				Circular references	Assignme		Analysis and Business Modelling, 3 <sup>rd</sup>
					nt topic		ed,2011. Redmond, WA: Microsoft Press.
					related to	SmartScreen,	Introduction to Management Science:
					Circular	Greenboard	Quantitative approaches to Decision
January					reference	,	making, by David Anderson, Dennis J.
2025			02	Circular references		PowerPoint.	Sweeney Thomas.
	27/01/2025	1/02/2025					Winston, W, Microsoft Excel 2010: Data
							Analysis and Business Modelling, 3 <sup>rd</sup>
							ed,2011. Redmond, WA: Microsoft Press.
January					Examples	SmartScreen,	Introduction to Management Science:
2025 and					on time	Greenboard	Quantitative approaches to Decision
February				Time and Time	and time	,	making, by David Anderson, Dennis J.
2025			02	Functions	functions.	PowerPoint.	Sweeney Thomas.
	3/02/2025	8/02/2025					Winston, W, Microsoft Excel 2010: Data
					Assignme		Analysis and Business Modelling, 3 <sup>rd</sup>
					nts and		ed,2011. Redmond, WA: Microsoft Press.
					even	SmartScreen,	Introduction to Management Science:
					exercises	Greenboard	Quantitative approaches to Decision
February				Paste special	given to	,	making, by David Anderson, Dennis J.
2025			02	command	this topic	PowerPoint.	Sweeney Thomas.
	10/02/2025	15/02/2025		UNIT 2			Winston, W, Microsoft Excel 2010: Data
				Three Dimensional	Exercises		Analysis and Business Modelling, 3 <sup>rd</sup>
				Formulas	on three		ed,2011. Redmond, WA: Microsoft Press.
					dimensio	SmartScreen,	Introduction to Management Science:
					nal	Greenboard	Quantitative approaches to Decision
February					formulas	,	making, by David Anderson, Dennis J.
2025			02	The Auditing Tools	and	PowerPoint.	Sweeney Thomas.

					auditing tool.		
	17/02/2025	22/02/2025		Canaditio ite e Anadersia	1001.		Winston, W, Microsoft Excel 2010: Data
	17/02/2023	22/02/2023		Sensitivity Analysis with Data Tables	Examples		Analysis and Business Modelling, 3 <sup>rd</sup>
				With Data Tables	given on		ed,2011. Redmond, WA: Microsoft Press.
					the Goal	SmartScreen,	Introduction to Management Science:
					seek	Greenboard	Quantitative approaches to Decision
February				The Goal Seek	command	Greenboard	making, by David Anderson, Dennis J.
2025			02	Command	Command	, PowerPoint.	Sweeney Thomas.
2023	24/02/2025	1/03/2025	02	Using the Scenario	Assignme	1 OWEIT OIII.	Winston, W, Microsoft Excel 2010: Data
	24/02/2023	1/03/2023		Manger for sensitivity	nt on		Analysis and Business Modelling, 3 <sup>rd</sup>
				analysis	COUNTIF,		ed,2011. Redmond, WA: Microsoft Press.
				anarysis	COUNTIFS	SmartScreen,	Introduction to Management Science:
February					and	Greenboard	Quantitative approaches to Decision
2025 and				COUNTIF, COUNTIFS	COUNT	Greenboara	making, by David Anderson, Dennis J.
March 2025			02	and COUNT Function	Function	, PowerPoint.	Sweeney Thomas.
Widi Cii 2025	3/03/2025	8/03/2025	02	COUNTA and	Tariction	1 OWEIT OILE.	Winston, W, Microsoft Excel 2010: Data
	3,03,2023	0,03,2023		COUNTBLANK	Exercises		Analysis and Business Modelling, 3 <sup>rd</sup>
				Function	on SUMIF		ed,2011. Redmond, WA: Microsoft Press.
				Tunction	and	SmartScreen,	Introduction to Management Science:
					AVERAGEI	Greenboard	Quantitative approaches to Decision
				SUMIF and AVERAGEIF	F	Greenbourd	making, by David Anderson, Dennis J.
March 2025			02	Functions	Functions	PowerPoint.	Sweeney Thomas.
	10/03/2025	15/03/2025		SUMIFS and			Winston, W, Microsoft Excel 2010: Data
	10,00,2025	13,03,2023		AVERAGEIFS Functions	Exercises		Analysis and Business Modelling, 3 <sup>rd</sup>
				AVERAGEIFS FUIICUOIIS	on		ed,2011. Redmond, WA: Microsoft Press.
					Condition	SmartScreen,	Introduction to Management Science:
					al	Greenboard	Quantitative approaches to Decision
				Conditional	Formattin		making, by David Anderson, Dennis J.
March 2025			02	Formatting	g	PowerPoint.	Sweeney Thomas.
5.1. 5.1. = 5 <b>25</b>	17/03/2025	22/03/2025			J		Winston, W, Microsoft Excel 2010: Data
	,,	,,		OFFSET Functions	Exercises	SmartScreen,	Analysis and Business Modelling, 3 <sup>rd</sup>
				J. I JE I I dilettolis	on	Greenboard	ed,2011. Redmond, WA: Microsoft Press.
					OFFSET	,	Introduction to Management Science:
March 2025			02	INDIRECT Function	and	PowerPoint.	Quantitative approaches to Decision

1					INDIRECT		making, by David Anderson, Dennis J.
					Function		Sweeney Thomas.
	24/03/2025	29/03/2025			Exercises		
				Sorting in Spreadsheet	on		Winston, W, Microsoft Excel 2010: Data
					Sorting in		Analysis and Business Modelling, 3 <sup>rd</sup>
					Spreadsh		ed,2011. Redmond, WA: Microsoft Press.
					eet and	SmartScreen,	Introduction to Management Science:
					Tables	Greenboard	Quantitative approaches to Decision
				Tables and Spin	and Spin	,	making, by David Anderson, Dennis J.
March 2025			02	Buttons	Buttons	PowerPoint.	Sweeney Thomas.
	31/03/2025	5/04/2025		Scroll Bars and option	Exercises		
				Buttons	on Scroll		
					Bars and		
					option		Winston, W, Microsoft Excel 2010: Data
					Buttons		Analysis and Business Modelling, 3 <sup>rd</sup>
					and		ed,2011. Redmond, WA: Microsoft Press.
					Check	SmartScreen,	Introduction to Management Science:
March 2025					Boxes and	Greenboard	Quantitative approaches to Decision
and April				Check Boxes and	Combo	,	making, by David Anderson, Dennis J.
2025			02	Combo boxes	boxes	PowerPoint.	Sweeney Thomas.
	7/04/2025	11/04/2025					Winston, W, Microsoft Excel 2010: Data
				Group List			Analysis and Business Modelling, 3 <sup>rd</sup>
							ed,2011. Redmond, WA: Microsoft Press.
						SmartScreen,	Introduction to Management Science:
					Exercises	Greenboard	Quantitative approaches to Decision
					on Group	,	making, by David Anderson, Dennis J.
April 2025			02	Revision	List.	PowerPoint.	Sweeney Thomas.

## Assessment Rubrics

Component	Max Marks
ISA 1	7.5 Marks
ISA 2	7.5 Marks
Semester	
End Exam	60 Marks