Lecture Plan

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

Name of Faculty: Dr. Guruprasad Ramakrishna Naik	**Subject:** Economics	
Paper code: ECO 221 (Decision Making with Spreadsheet-I)	**Program: S.Y.B.A.**	**Division: -**
Academic year: 2024-2025	**Semester: IV**	**Total Lectures:16**

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.

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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.

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

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

					auditing tool.		
February 2025	17/02/2025	22/02/2025	01	Sensitivity Analysis with Data Tables The Goal Seek Command	Examples given on the Goal seek command.	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
February 2025 and March 2025	24/02/2025	1/03/2025	01	Using the Scenario Manger for sensitivity analysis COUNTIF, COUNTIFS and COUNT Function	Assignment on COUNTIF, COUNTIFS and COUNT Function	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
March 2025	3/03/2025	8/03/2025	01	COUNTA and COUNTBLANK Function SUMIF and AVERAGEIF Functions	Exercises on SUMIF and AVERAGEIF Functions	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
March 2025	10/03/2025	15/03/2025	01	SUMIFS and AVERAGEIFS Functions Conditional Formatting	Exercises on Conditional Formatting	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
March 2025	17/03/2025	22/03/2025	01	OFFSET Functions INDIRECT Function	Exercises on OFFSET and	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision

					INDIRECT Function		making, by David Anderson, Dennis J. Sweeney Thomas.
March 2025	24/03/2025	29/03/2025	01	Sorting in Spreadsheet Tables and Spin Buttons	Exercises on Sorting in Spreadsheet and Tables and Spin Buttons	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
March 2025 and April 2025	31/03/2025	5/04/2025	01	Scroll Bars and option Buttons Check Boxes and Combo boxes	Exercises on Scroll Bars and option Buttons and Check Boxes and Combo boxes	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.
April 2025	7/04/2025	11/04/2025	01	Group List Revision	Exercises on Group List.	SmartScreen, Greenboard, PowerPoint.	Winston, W, Microsoft Excel 2010: Data Analysis and Business Modelling, 3rd ed,2011. Redmond, WA: Microsoft Press. Introduction to Management Science: Quantitative approaches to Decision making, by David Anderson, Dennis J. Sweeney Thomas.

Assessment Rubrics

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