Semester Lecture Plan

Name of the college: Government college of Arts, Science and Commerce , Sanquelim Goa						
Name of Fa	Name of Faculty: Amit H Thakur Subject: Mathematics					
Paper code:	MAT-100		Program/Course: F.Y.	.B.Sc.	Division: -	
Academic y	Academic year: 2024 – 2025 Semester: II Total Lectures: 30					
Course Lear 1) Infer 2) Exan 3) Make 4) Solve	ning Outcome: The truth of variou	ne students w us sentences a he types of re and weak in equations	and its equivalents and out elations and functions duction	•		
Month	Lectures From:	To: S	Topic, Subtopic to be	Exercise	ICT Tools	Reference books

December			02				
				Identifying and using			
		14/12/24		quantifiers, negating			
	Week 2			statements with single and			
	09/12/24			multiple quantifiers,			Ajit Kumar, S.
	03/12/24			compound statements with			Kumaresan, and
				quantifiers, conjunction and			B. K. Sarma: A
				disjunction of statements,			Foundation
				and negation of a compound	Problem		Course in
				statement	Solving	Chalk-board	Mathematics
December			02				
	Week 3			Different forms of			Ajit Kumar, S.
		21/12/24		implications, converse of			Kumaresan, and
	16/12/24			implications, negating			B. K. Sarma: A
				implications, and			Foundation
				contrapositive of	Problem		Course in
τ			02	implications	Solving	Chalk-board	Mathematics
January	Week 4		02				Aiit Kumaar S
		04/01/25					Ajit Kumar, S. Kumaresan, and
	02/01/25	04/01/25					B. K. Sarma: A
							Foundation
				Different types of proofs in	Problem		Course in
				mathematics	Solving	Chalk-board	Mathematics
January			02	indificitides	5011115		Mathematics
o unio uni j			02				Ajit Kumar, S.
	Week 5	11/01/25					Kumaresan, and
				Operations on sets like			B. K. Sarma: A
	06/01/25			union, intersection, set			Foundation
				difference, and	Problem		Course in
				complementation	Solving	Chalk-board	Mathematics
January	Week 6		02				Ajit Kumar, S.
							Kumaresan, and
	13/01/25	18/01/25					B. K. Sarma: A
							Foundation
				Identifying one-one and	Problem		Course in
				onto functions-I	Solving	Chalk-board	Mathematics

January	Week 7		02				Ajit Kumar, S.
	WCCK /	25/04/25					Kumaresan, and
	20/01/25	25/01/25					B. K. Sarma: A
							Foundation
				Identifying one-one and	Problem		Course in
				onto functions-II	Solving	Chalk-board	Mathematics
January-			02				
February	Week 8	01/02/25					Ajit Kumar, S.
		01/02/25					Kumaresan, and
	27/01/25			Finding natural bijections			B. K. Sarma: A
				between given sets and			Foundation
				finding the inverse of	Problem		Course in
				bijective functions	Solving	Chalk-board	Mathematics
February			02				
	Week 9	00/02/25					Ajit Kumar, S.
		08/02/25					Kumaresan, and
	03/02/25						B. K. Sarma: A
							Foundation
							Course in
				Inverse image of subsets	Problem		Mathematics
				under functions	Solving	Chalk-board	
February	Week 10		02				
	WEEK IV	15/02/25					Ajit Kumar, S.
	10/02/25	15/02/25					Kumaresan, and
				Identifying the type of			B. K. Sarma: A
				relation and obtaining			Foundation
				equivalence classes of an	Problem		Course in
				equivalence relation.	Solving	Chalk-board	Mathematics
February	Week 11		02				Ajit Kumar, S.
		22/02/25					Kumaresan, and
	17/02/25	22/02/25					B. K. Sarma: A
							Foundation
				Using induction principles to	Problem		Course in
				establish statements	Solving	Chalk-board	Mathematics

February- March			02				
	Week 12	01/03/25					
	Week 12						W. K. Nicholson: Linear Algebra
	24/02/25						with
							Applications, 4 th
				Solving system of linear			Edition, McGraw
				equations using elementary	Problem		– Hill Ryerson
				operations	Solving	Chalk-board	Limited, 2003.
March			02				M/ K Nichologu
	Week 13	08/03/25					W. K. Nicholson: Linear Algebra
	Week 15	00,00,25					with
	03/03/25			Reducing a matrix to row			Applications, 4 th
				echelon form using Gaussian	Problem		Edition, McGraw
				algorithm	Solving	Chalk-board	– Hill
March			02				W. K. Nicholson:
	TT 1 1 4	15/03/25					Linear Algebra with
	Week 14	13/03/23					Applications, 4 th
	10/03/25						Edition, McGraw
				Solving homogeneous	Problem		– Hill Ryerson
				system of equations	Solving	Chalk-board	Limited, 2003.
March			02				
		22/02/25					W. K. Nicholson:
	Week 15	22/03/25					Linear Algebra with
							Applications, 4 th
	17/03/25			Computing determinants			Edition, McGraw
				using the properties of	Problem		– Hill Ryerson
				determinants	Solving	Chalk-board	Limited, 2003.
March			02				
	Week 16	20/02/25					W. K. Nicholson:
	24/03/25	29/03/25		Solving a system of	Problem		Linear Algebra with
	24/03/23			equations using Cramer's rule	Solving	Chalk-board	With Applications, 4 th
				, arc	5014116		

							Edition, McGraw – Hill Ryerson Limited, 2003.
March-April	Week 17		02				
	31/03/25	05/03/25		Revision	Problem Solving	ChalkBoard	
April	7/04/25	11/04/25	02				
				Practical Exam			

* Assessment Rubrics

Component	Max Marks
ISA 1	-
ISA 2	-
Practical	25
Project	-
Semester End	
Exam	-