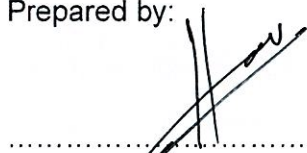


PROGRAM SIJIL TEKNOLOGI MAKLUMAT
COURSE OUTLINE

1.	NAME OF COURSE	BASIC MATHEMATICS
	COURSE CODE	SFC11593
2.	SYNOPSIS	Basic Mathematics was designed to introduce students to fundamental mathematical concepts and to demonstrate analytical and critical thinking skills using appropriate techniques in problem solving. This course covers the topics of numbering system, sets and relations, functions, and graph theory in information technology applications.
3.	CREDIT VALUE	3
4.	PREREQUISITE/ CO-REQUISITE (IF ANY)	None
5.	COURSE LEARNING OUTCOMES (CLO):	
	Upon completion of this course, students should be able to:	
	CLO1	interpret the conversion and relationships between numbers in different numbering systems. (C2, PLO7)
	CLO2	explain the fundamental concepts of sets, relations, functions, and graphs relevant to Information Technology applications. (C2, PLO1)
	CLO3	apply appropriate mathematical operations to solve problems related to the Numbering System, Set Theory, Relations, Functions, and Graph Theory. (C3, PLO2)
6.	PROGRAMME LEARNING OUTCOMES (PLO):	
	PLO 1: Explain essential knowledge and understanding of Information Technology related to job functions.	
	PLO 2: Use Information Technology design and architecture to solve simple problems as described in user and technical manuals.	
	PLO 7: Apply relevant numerical skills in computing related to job functions	
6.	ASSESSMENT METHOD:	
	The course assessment consists of: i. Continuous Assessment (CA) – 70% - Quiz 2 = 20% - Test 1 = 20% - Assignment 1 = 30% ii. Final Examination (FE) / Final Assessment (FA) – 30%	

7.	TEACHING SCHEDULE:				
	Topic No.	Topic/Content	Recommended Contact Hours	Assessment Method	Week
	1.0	NUMBERING SYSTEM	7 hours Lecture 0 hours Practical	Quiz 1 Final Exam	W1 – W4
	2.0	SET AND RELATION	20 hours Lecture 0 hours Practical	Quiz 2 Final Exam	W4 – W7
	3.0	FUNCTION	6 hours Lecture 0 hours Practical	Assignment Final Exam	W8 – W10
	4.0	GRAPH THEORY	18 hours Lecture 0 hours Practical	Test 1 Final Exam	W10 – W14
8.	REFERENCES		Main Reference (s): Devlin, K. (2018), <i>Sets, Functions, And Logic: An Introduction To Abstract Mathematics</i>. Crc Press. (ISBN 978-1-4822-8602-1) Ryan, T., White. & Archana Tikayat Ray. (2021). <i>Practical Discrete Mathematics</i>. Packt Publishing Ltd. (ISBN 978-1-83898-314-7) Additional Reference (s): Charles, H., Roth. & Larry, L., Kinney. (2013). <i>Fundamentals Of Logic Design</i>. Cengage Learning. (ISBN 978-1133628477) Thomas, L., Floyd. (2014). <i>Digital Fundamentals Global Edition</i>. Pearson Education. (ISBN 978-0132737968)		

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TIMBALAN PENGARAH
KOLEJ KOMUNITI BAGAN DATUK

(SITI SALWA UMAIRAH BINTI KHALIL)

Date : 4 AUGUST 2025

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