Mahidol University, International College & Faculty of Engineering
Department of Computer Engineering
Guide to Final Examination Trimester 1/2025-26
EGCI 234: Digital Circuit Design

Date: 09 December 2025

Time: 1 Hour 50 Minutes   Total Mark: 50+5

Instruction: Answer all questions in the book provided.

(15 marks) Combinational Circuits Design
(6, 9 marks) combinational circuit design (arithmetic citcuit), combinational circuit design (MUX)

(23 marks) Sequential Circuits Design
(5, 8, 10 marks) general, counter, sequential circuit with 2 functions

(12 marks) ADC & DAC
(6, 6 marks) DAC properties, explain one type of ADC

Bonus
(5 marks) ADC & DAC: calculation