## **Learning Material - Experiment in ICT 2**

## Week 5

## Goal of week

Review Quine-McCluskey method Review Quine-McCluskey method with don't care

## **Exercises**

- 1. Use the Quine-McCluskey method to obtain the minimal sum for the following functions
  - a.  $F = \sum (2, 6, 7, 8, 10)$
  - b.  $F = \sum (1, 4, 6, 7, 8, 9, 10, 11, 15)$
  - c.  $F = \sum (0, 1, 2, 3, 5, 8, 11)$
  - d.  $F = \sum (0, 2, 3, 5, 7, 9, 11, 13, 14, 16, 18, 24, 26, 28, 30)$
  - e.  $F = \sum (6, 9, 13, 18, 19, 25, 27, 29, 41, 45, 57, 61)$
  - f.  $F = x_1'x_2 + x_1'x_2'x_4 + x_1x_2'x_4$