King Fahd Univesity of Petroleum & Minerals Department of Electrical Engineering

EE200-03

(062)

Homework # 6

- 1. Problem 7.19 of your textbook.
- 2. Problem 7.22 of your textbook.
- 3. Design a combinational circuit that implements the following Boolean functions:

$$F_1(A,B,C,D)=A'BC'+ABC'D'+ABC'+A'B'C+AB'C$$

$$F_2(A,B,C,D) = \Sigma(0,1,6,7,9,14,15)$$

Using a PLA with the minimum number of product terms. Determine the size of the PLA and its program table.