# KING FAHD UNIVERSITY OF PETROLEUM \& MINERALS <br> Department of Electrical Engineering 

| EE200-03 Digital Logic Circuit Design | Quiz \# 2 | 12 October 2005 |
| :--- | :--- | :--- |
| Student's Name: |  |  |

1. Reduce the following Boolean function to the minimum number of literals:

$$
F(A, B, C, D)=\left(B^{\prime} C^{\prime}+D\right)^{\prime}+D+B C+A D
$$

2. Obtain the truth table of the following Boolean function and then express it as a sum of minterms and product of maxterns.

$$
F(x, y, z)=y z^{\prime}+x y+x z
$$

