**CHAPTER (1) HOMEWORK SOLUTION**

**Problem (1-18)**

(a) Maximize the difference between output and input.
(b) Minimize input.
(c) Maximize the difference between output and input.
(d) Minimize input.

**Problem (1-27)**

Plan A  Profit = Income – Cost = $800 - $600 = $200/acre
Plan B  Profit = Income – Cost = $1,900 - $1,500 = $400/acre
Plan C  Profit = Income – Cost = $2,250 - $1,800 = $450/acre
Plan D  Profit = Income – Cost = $2,500 - $2,100 = $400/acre

To maximize profit, choose Plan C.

**Problem (1-29)**

The most common large problem faced by undergraduate engineering students is where to look for a job and which offer to accept. This problem seems ideal for listing student ideas on the board or overhead transparencies.

**Question (2)**

1. The contractor will lose since he will not invest the money with the market investment rate (annually = 10%).

2. !!!

**GOOD LUCK**