Course No: ACC 3308 – MAN 3310 Course Title: Managerial Accounting Date: 28/07/2013 No. of Questions: (3) Time: 1 hour Using Calculator (yes)



Instructor Name: Dr. Khaled Eissa

Student No.:

Student Name:

College Name: Business Administration Dep. / Specialist: Accounting Using Dictionary (No)

# Question 1:

Jobs, Inc. has recently started the manufacture of Tri-Robo, a three-wheeled robot that can scan a home for fires and gas leaks and then transmit this information to a mobile phone. The cost structure to manufacture 20,000 Tri-Robos is as follows:

	COSI
Direct materials (\$50 per robot)	\$1,000,000
Direct Labor (\$40 per robot)	800,000
Variable overhead (\$6per robot)	120,000
Allocated fixed overhead (\$30 per robot)	600,000
Total	\$2,520,000

Jobs is approached by Tienh Inc., which offers to make Tri-Robo for \$115 per unit or \$2,300,000

## Required:

Using incremental analysis, determine whether Jobs should accept this offer under each of the following independent assumptions.

- a. Assume that \$405,000 of the fixed overhead cost can be reduced (avoided)
- b. Assume that none of the fixed overhead can be reduced (avoided). However, if the robots are purchased from Tienh Inc., Jobs can use the released productive resources to generate additional income of \$405,000

### **Question 2:**

Naylor company estimates that variables cost will be 62.5% of sales, and fixed costs will total \$1,200,000. The selling price of the product is \$8.

- a. Compute the break-even point in (1) units and (2) dollars
- b. Compute the margin of safety in (1) dollars and (2) as a ratio, assuming actual sales are \$4 million.

### Question 3:

Personal Electronix sells iPads and iPods. The business is divided into 2 divisions along product lines. CVP income statements for a recent guarter's activity are presented below:

J	1		
	iPad Division	iPod Division	<u>Total</u>
Sales	\$ 600,000	\$ 400,000	\$ 1,000,000
Variable costs	420,000	260,000	680,000
Contribution Margin	\$ 180,000	\$ 140,000	320,000
Fixed Costs			120,000
Net Income			\$ 200,000

### Required:

- a. Determine sales mix percentage and contribution margin ratio for each division
- b. Calculate the company's weighted-average contribution margin ratio
- c. Calculate the company's break-even point in dollars
- d. Determine the sales level in dollars for each division at the break-even point.

<<< Good Luck >>>