IE 256 Engineering Management <u>Fall 1423</u>

Midterm Exam

<u>November 23rd, 2002</u>

Computer Number: _____

A. Indicate whether the following statements are True or False: (1 point each)

- 1. **T F** In a Partnership, the owners have limited liability
- 2. T F Middle Management is more concerned with short-term planning
- **3. T F** The Mission Statement is defined by First-line managers
- 4. **T F** First-line managers need a lot of conceptual skills
- 5. **T F** We "Lead" people when we influence their behavior
- 6. T F The simple regression model of forecasting assumes a linear relationship between the "Periods" and actual values.
- 7. **T F** Larger spans of control require more training for all levels of personnel.
- 8. T F The Mission Statement is an outline of a company's long-term objectives
- 9. T F "Market Share" can be a strategic objective
- 10. T F Forecasting helps us predict what a certain future event will be.

B. Make the proper choice from the following: (2 points each)

1.		When a manager is solving problems, he is probably assuming the							
	Α	Interpersonal role							
	В	Leader role							
	С	Informational role							
	D	Decisional role							
2.		Technical skills are mostly needed by							
	Α	Top Management							
	В	Middle Management							
	С	First-line Management							
	D	All of the above							
3		First-line managers are responsible for							
	Δ	Carrying out plans							
	B	Carrying out plans							
	C	Supervising workers and technicians							
	D	All of the above							
4	ν	The most important managerial function is:							
4.		I ne most important managerial function is:							
	A P	Organizing							
	D	Organizing							
		Dianning							
-	υ								
5.	•	The first step in any Planning process is:							
	A	Defining the problem							
	B	Gathering needed information							
		News of the choice							
_	D	None of the above							
6.		Planning Horizon is:							
	A	The level of planning							
	B	The required details in a plan							
	C	How far into the future a plan is developed for							
	D	All of the above							
7.		Which of the following is one of the key areas to establish strategic objectives							
	Α	Information Revolution							
	B	Key Technology							
	C	Strategic Management							
	D	Market Share							
8.		Plan details are defined by the							
	Α	Planning Horizon							
	B	Innovation							
	С	Management Performance							
	D	Market Share							
9.		Which of the following is a qualitative forecasting method?							
	Α	Exponential Smoothing							
	B	Regression							
	С	Sales Force Composite							
	D	Project Planning							
10.		What is the case when making decisions under risk?							
	Α	Both future states of nature and corresponding probabilities with different amounts are known							
	B	Both future states of nature and corresponding probabilities with different amounts are unknown							
	С	Future states of nature are known but probabilities are not known							
	D	Both future states of nature and corresponding probabilities with different amounts are known. One of							
		the probabilities is set to 1 and the others are set to "0"							

C. You have a small company and produce 2 different products. Your profit for the product X is \$60 per unit and \$80 for unit of product Y. Producing the X requires 4 hours of machining and 2 hours of assembling. For Y you need 6 hours of machining and 2 hours of assembling. You employ 6 people for machining and 4 assemblers each working 40 hours a week. Graphically, find the product mix which will give maximum profit. Your work should show:

Objective Function (8 points) Feasible Region (8 points)					Constraints (8 points) Optimum Solution (8 points)				Draw Lines (8 points)					
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D. For a steel manufacturing company, the amount of steel production for each year is given below. Forecast the amount of steel production for year 2005 using a simple regression model. (30 points)

Year (t)	Actual Steel Production Value (At)	
2000	3000	
2001	3500	
2002	3700	
2003	4500	