FACULTY OF MANAGEMENT STUDIES

UNIVERSITY OF DELHI

Semester Examination 2013

Name of Examination..... **MBA FULL TIME, Semester 1, November 2013** .....

Paper Name **MANAGERIAL ECONOMICS** ..Paper No.....**6103**.....Option.....

Time allowed.....**3 HOURS**.....Hours Maximum Marks..... ...**50**... .....

Instructions to candidates regarding the number of questions to be answered etc. should be indicated in space provided below.

Answer any five questions. All questions carry equal marks. Calculators are allowed.

Serial No. of Question	**Answer any five questions. All questions carry equal marks.**	Marks
1.	Consider the following table for elasticity and cross-price elasticity:	6+4

Type of apples	Shimla Apples	Kinnaur Apples	Kashmiri Apples
Shimla	- 3.07	+ 1.56	+ 0.01
Kinnaur	+ 1.16	- 3.01	+ 0.14
Kashmiri	+ 0.18	+ 0.09	- 2.79

(a) For each variety of apples determine whether seller's total revenue will increase, decrease or remain unchanged with a 10% decrease in price. Quantify the % changes in total revenue for each of the three varieties.
(b) What do you learn about consumers' perception of how similar these apples varieties are from the table above? Suppose you are a Shimla-apple producer, how would you use the information obtained from the table?

2.	The demand and supply in a competitive market is given by Q_d 100 P and Q_s P respectively.	1+5+4

(a) Calculate the competitive market equilibrium.
(b) The Government now imposes an excise tax of T=10. Determine the new price and quantity in the market. Calculate the total surplus and compare it with the total surplus from part a. If there is a dead-weight loss in this case, explain what is causing that inefficiency. Determine whether the consumers or the producers are bearing most of the burden of this tax. Relate the incidence of tax with the price elasticities of demand and supply.
(c) Suppose now instead of excise tax, Government imposes a price ceiling of P=45. Calculate total surplus and compare it with the total surplus from part b. What are the short-run and long-run implications of this policy?

3.	In the market for granulated packaged sugar, all firms and potential entrants are the identical. Each has a long-run total cost curve, $TC(q) = 100 + q^2$ for positive q and $TC(q) = 0$ for $q=0$. The market demand is $Q_d = 10{,}000 - 100P$. Assume a competitive market structure. (a) Find the industry output in long-run equilibrium. (b) Suppose now there is a fall in the demand for sugar such that the new demand is: $Q_{dnew} = 5{,}000 - 50P$. Draw the graph of a typical firm and a separate graph of the sugar market and explain the impact of this change in the short-run and the long-run. Compare the various long-run variables from part (a) to the new long-run variables.	2+8
4.	Imagine that Samsung and LG are the only two firms selling refrigerators in certain market. The demand curve for refrigerators is given by: $P = 100 - Q$, where P is the market price and Q is the total quantity. Quantity produced by Samsung is denoted by Q_1 and quantity produced by LG is given by Q_2. Each firm is identical in terms of the product they sell and the technology. Each has a marginal cost of 10. (a) Write down LG's reaction function and draw it. Also write down Samsung's reaction function and draw it in the same graph. (b) Compute the Cournot Equilibrium quantities and price. (c) Would you expect a different outcome (in terms of P and Q) if Samsung and LG decide to form a cartel instead of being Cournot competitors? Explain.	4+2+4
5.	(a) Market for bananas is a competitive one. The equilibrium price in the market for bananas is Re 0.50 per piece. At this price, the quantity sold is 1 million pieces. Assume that both market demand and market supply curves are linear. Suppose the price elasticity of demand is -4 and the price elasticity of supply is 0.01 at market equilibrium. Find the equations for demand and supply. Draw both the demand and the supply curves. (b) Define elasticity of substitution in production. Suppose a firm's production function is such that the value of its elasticity of substitution is close to 0 at its current level of output. The firm uses labor and capital as inputs. If now the price of labor doubles, how is the firm going to adjust its optimal input demand compared to the initial situation. Discuss qualitatively, assuming a profit-maximizing firm.	5+5
6.	Write short-notes on **any two**: (a) Third Degree Price Discrimination (b) Shutdown price determination in competitive markets (c) Sales maximization versus profit maximization	5+5