

BEC 30325: MANAGERIAL ECONOMICS

Tutorial 02

Demand and Elasticity

- 1) Define quantity demanded and identify the determinants of demand.
- 2) Assume that the equations for demand and supply of a particular good are:

$$QD = 100 - 3P \text{ and } QS = 4 + 5P$$

Calculate the equilibrium price and quantity.

- 3) The demand for automobiles is often described as highly cyclical, and very sensitive to automobile prices and interest rates. Given these characteristics, describe the effect of each of the following in terms of whether it would increase or decrease the quantity demanded or the demand for automobiles. Moreover, when price is expressed as a function of quantity, indicate whether the effect of each of the following is an upward or downward movement along a given demand curve or instead involves an outward or inward shift in the relevant demand curve for autos. Explain your answers.
 - a) A decrease in auto prices
 - b) A fall in interest rates
 - c) A rise in interest rates
 - d) A severe economic recession
- 4) There is a producer who sells two products, tooth brushes and tooth pastes. The demand faced by each of the product is given below.

Tooth brushes: $QTB = 10,060 - 1.2P$

Tooth Pastes: $QTP = 600 - 4P$

Current price for the tooth brushes and tooth pastes is, Rs 50 and Rs. 100, respectively.

- a) Find the current demand for the two products
 - b) Calculate the price elasticity of the two products at the current prices
 - c) The producer has decided to increase the price of the two products by 10%. You are to advise him regarding this decision to increase the price.
- 5) Explain the Identification problem in Demand, use a graph to support the answer.