

# **Eco401 (Economics)**

**Marks: 20**

## **Solution: Assignment # 01**

### **Question 01**

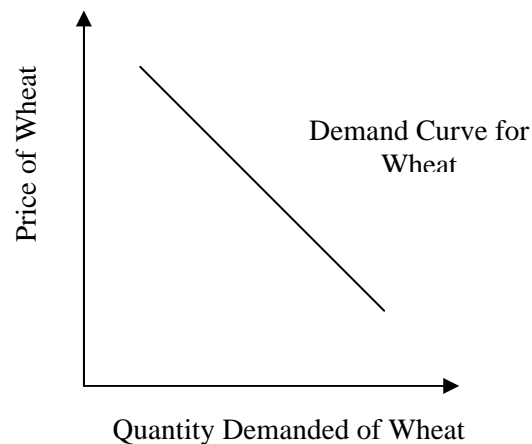
Suppose a hypothetical economy produces two goods i-e wheat and rice.

- A. Draw the demand curve for wheat.
- B. Draw the supply curve of wheat.
- C. Determine the equilibrium in the wheat market with the help of graphs.
- D. If there is an increase in the price of rice, what will be its impact on the market equilibrium? Show graphically.
- E. If government imposes tax on wheat production, what will be its impact on market equilibrium? Show graphically.

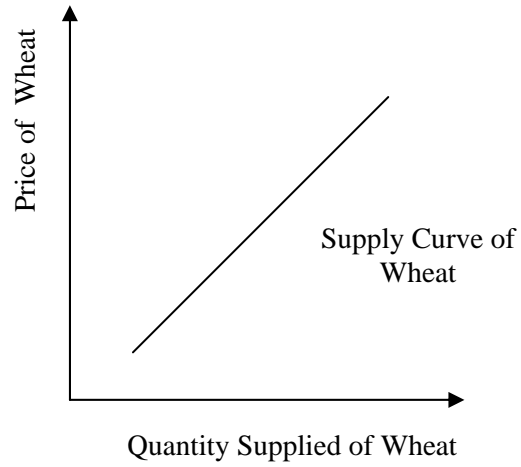
(Marks: A = 2, B = 2, C = 4, D= 3, E = 3)

### **Solution:**

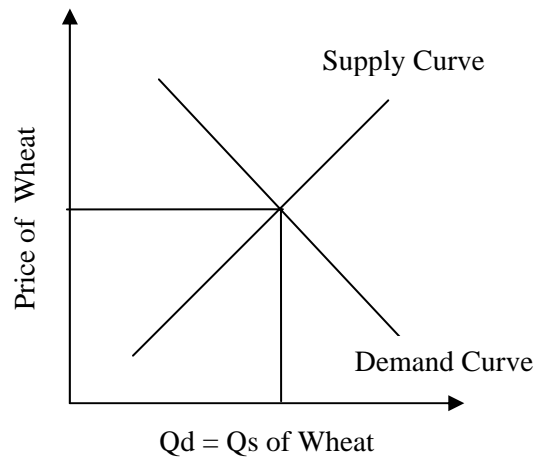
**A.**



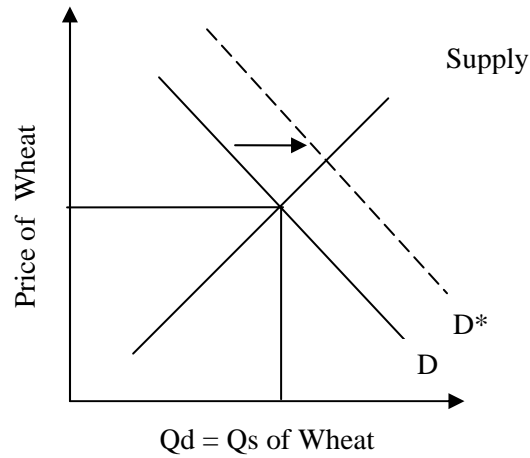
**B.**



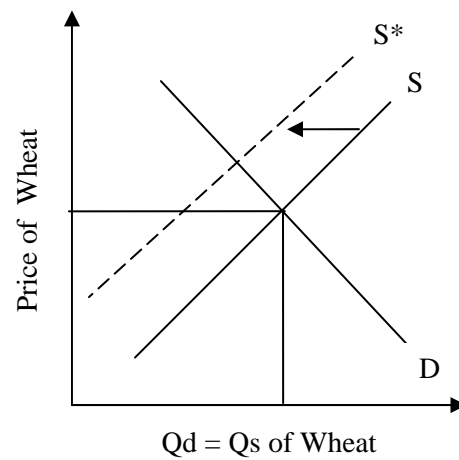
C.



D. Demand of wheat will increase and demand curve will shift rightward.

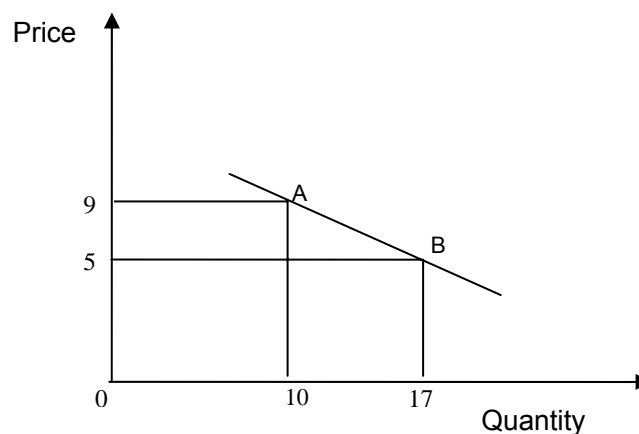


E. Supply of wheat will reduce and supply curve will shift leftward.



## Question 02

A.



In the above graph, price is plotted on the vertical axis and quantity is plotted on the horizontal axis. From the information given in the graph, calculate price elasticity of demand between two points from point A to B.

### Solution:

Elasticity from point A to B can be calculated as:

$$\epsilon_{AB} = \frac{\text{Percentage change in } Q_d}{\text{Percentage change in } P}$$

$$= \frac{17 - 10}{10} \div \frac{5 - 9}{9}$$

$$= \frac{7}{10} \div \frac{-4}{9}$$

$$\begin{aligned} &= \frac{7}{10} \times \frac{9}{-4} \\ &= -\frac{63}{40} \\ &= -1.575 \end{aligned}$$

**B.** Suppose the price of Pepsi rises by 8%, as a result demand of Coca Cola increases by 11%. Calculate the cross price elasticity of demand for Coca Cola.

$$\begin{aligned} \text{Cross Price Elasticity} &= \frac{11\%}{8\%} \\ &= 1.375 \end{aligned}$$

(Marks: A = 4, B = 2)

**BEST OF LUCK**