

End Semester Examination, December 2017

Program: BTech CSE TI/ OG/ SCF
Subject (Course): Managerial Economics
Course Code : BBCE114
No. of page/s:

Semester – VII
Max. Marks : 100
Duration : 3 Hrs

Section- A (20 Marks)

Note- Attempt all objective type questions. Each question has 2 Marks.

1. The law of demand states that
 - A. Other things remaining equal, as the price increases the demand increases
 - B. Other things remaining equal, as the price increases the quantity demanded decreases
 - C. As the income level of the consumer increases the quantity demanded increases.
 - D. None of the above

2. Market equilibrium refers to a situation in which market price
 - A. is high enough to allow firms to earn a fair profit.
 - B. is low enough for consumers to buy all that they want
 - C. is at a level where there is neither a shortage nor a surplus
 - D. is just above the intersection of the market supply and demand curves

3. What is the effect of an increase in the price of fuel on the transportation services market where fuel is an input?
 - A. The demand will increase.
 - B. The demand will decrease.
 - C. The supply will increase.
 - D. The supply will decrease.

4. Which of the following market structures has homogeneous products?
 - A. Perfect Competition
 - B. Monopoly
 - C. Monopolistic Competition
 - D. Oligopoly

5. Percentage change in demand of X/percentage change in price of Y
 - A. Price elasticity of demand
 - B. Income elasticity of demand
 - C. Cross elasticity of demand
 - D. Promotional elasticity



6. In Economics Central Problem is –
- A. Production
 - B. Money
 - C. Consumption
 - D. Scarcity
7. Which of the following **does not** cause a shift in the demand curve?
- A. Change in the price of the good.
 - B. Change in the income of the buyers.
 - C. Change in the personal preferences.
 - D. Change in the price of the related goods.
8. Laffer curve shows the relationship between
- A. Deadweight loss and tax revenue
 - B. Input and output
 - C. Tax revenue and tax size
 - D. Cost and output
9. A good is normal if a rise in consumers' income causes
- A. the quantity demanded to increase.
 - B. The demand to decrease.
 - C. the demand to increase.
 - D. None of the above is correct.
10. A demand curve is said to be perfectly inelastic if it is
- A. Horizontal
 - B. Vertical
 - C. Downward Sloping
 - D. Upward sloping

Section B (20 Marks)

Note- Which of the following statements are true or false. Each question has 2 Marks.

- i. Loss in total surplus due to market distortion such as tax is known as deadweight loss.
- ii. DVD and TV Screens are substitute goods.
- iii. As income rises, demand for inferior good falls.
- iv. Deadweight loss increases as elasticity decreases.
- v. Binding price ceiling leads to shortage.

- vi. Cross elasticity of demand means the sensitivity of quantity demanded of a commodity to a given change in its own price.
- vii. If demand curve is more elastic than the supply curve, tax burden lies more on buyers than sellers.
- viii. A shift in demand is referred to as a change in quantity demanded.
- ix. Technological advancement causes a shift in the demand curve.
- x. Income Elasticity of demand is negative for inferior goods.

Section C (30 Marks)

Note- Attempt any 3 questions. Each question has 10 Marks.

1. Solve the supply and demand curves for equilibrium price, quantity, consumer surplus, producer surplus and total surplus. Also, show in a diagram. Shade and label the respective area.

$$Q_d = 15 - P$$

$$Q_s = -5 + P$$

2. Write short notes on any 5 of the following:

- I. Perfect Competition
- II. Cross Elasticity of Demand
- III. Deadweight loss
- IV. Market Equilibrium
- V. Tax Incidence
- VI. Complements & Substitutes

3. Using supply and demand diagrams, show the effect of the following events on market for personal computers:
 - i) The price of computer software rises.
 - ii) The price of computer chip falls.
4. What happens to deadweight loss and tax revenue when a tax is increased? Explain with the help of laffer curve.

Section D (30 Marks)

Note- Attempt any 2 questions. Each question has 15 Marks.

Price (In \$)	Quantity demanded (Business travellers)	Quantity demanded (Vacationers)
150	2100 tickets	1000 tickets
200	2000	800
250	1900	600
300	1800	400

Using the table,

- i) As the price of ticket rises from \$200 to \$250, what is the price elasticity of demand using mid point method for
 - a) Business travelers
 - b) Vacationers
- ii) Calculate the Price elasticity of demand using point elasticity method/ Derivative method for the equation $Q^D = 1500 - 100P$ when $P = \text{Rs. } 10$ and $Q = 500$ units.

2. The demand function for Good X is defined as $Q_X = 75 - 2P_X - 1.5P_Y$, where P_Y is the price of Good Y . Calculate the price elasticity of demand using the mid-point formula for $P_X = 20$ and $P_Y = 10$. Determine whether demand is elastic, inelastic, or unit elastic with respect to its own price and whether Good Y is a substitute or a complement with respect to Good X . Define the cross elasticity of demand.

3. i) How do the market structures of perfect competition and monopoly differ from each other?

ii) What happens to consumer and producer surplus when the sale of a good is taxed? How does the change in consumer and producer surplus compare to tax revenue? Explain.

