

University of Asia Pacific
Department of Computer Science & Engineering
Mid-Semester Examination, Fall - 2020
Program: B. Sc. Engineering

Course Title: Economics
Time: 1 Hour

Course Code: ECN 201

Credit: 02
Full Marks: 20

(Answer ALL the Questions.)

1. Why is the value of elasticity of demand always negative and the value of elasticity of supply always positive? (2)
2. Consider Bangladesh producing only two goods: coconuts and televisions. When she uses all of her resources, she can produce any of the following combinations of coconuts and televisions:

Combinations	Coconuts (in millions)	Televisions (in thousands)
A	0	25
B	30	19
C	64	9
D	100	4
E	150	0

Requirements:

- a) Graphically represent the Production Possibility Frontier (PPF) of Bangladesh. (2)
- b) If Bangladesh produces 50 million coconuts and 8,000 televisions, can she attain productive efficiency? Why or why not? (.5+1 = 1.5)
- c) What will be the opportunity cost if Bangladesh switches her production from Combination A to Combination C? (1)
3. Pizza is a very popular food in Dhaka city. Show in a diagram the effects on the demand or supply curve, the equilibrium price, and the equilibrium quantity of each of the following events. Note that the events are not interrelated. (4×1.5 = 6)
- a) The number of restaurants increases in Dhaka city.
- b) The government has lowered tax on the price of pizza.
- c) The restaurants will give a 20% discount on pizza next month.
- d) A report shows that selling burgers generates more profit than selling pizza.
4. The demand and supply schedule of hand sanitizers is given below.

Price (Tk.)	Quantity Demanded (million bottles)	Quantity Supplied (million bottles)
50	45	27
100	40	28
150	35	29
200	30	30
250	25	31
300	20	32

Requirements:

- a) Draw the demand curve and supply curve and find out the equilibrium price and quantity of hand sanitizers. (1.5 + 1 = 2.5)
- b) What would occur if the price were initially set at Tk. 250 per hand sanitizer? (1.5)
- c) Now suppose that quantity demanded of hand sanitizers increases by 10 million bottles at each price level and quantity supplied increases by 16 million bottles at each price level.
 - i) Prepare the new demand and supply schedule. (1)
 - ii) Draw a diagram to show new demand and supply curves and find out new equilibrium price and quantity of hand sanitizers. (1.5 + 1 = 2.5)

Best Wishes for Your Exam!!!