

PRINCIPLES OF ECONOMICS: SEC : F

MIDTERM ASSIGNMENT

TOTAL MARKS: 20

DUE DATE: 24th October 2022

LATE SUBMISSION: NO MARKS WILL BE GIVEN

1. Consider a hypothetical economy in which there are two types of good, guns and butter. There are 4 workers of the economy. A worker can produce in either the guns industry or the butter industry.

Following table shows how much of each good can be produced per week.

GUNS		BUTTER	
Employment	Output	Employment	Output
4	35	0	0
3	32	1	19
2	27	2	27
1	20	3	34
0	0	4	40

- Draw society's production possibility frontier (PPF).
- Indicate an inefficient point. Why those points inside the PPF are inefficient?
- Indicate an efficient point. Why points on the PPF are efficient?
- Indicate an unattainable point. Explain why points outside the frontier are unattainable.

2. The following is the hypothetical supply and demand schedule for sugar:

Price (Tk.)	Quantity demanded (Kg)	Quantity Supplied (Kg)
4	1000	400
8	800	400
12	600	400
16	400	400
20	200	400

- Plot the demand and supply curve for sugar
- Find the equilibrium price and quantity of sugar
- What will happen to equilibrium price and quantity if incomes of the consumers of sugar are increased? Discuss with a relevant diagram. (Note: Sugar is considered to be a normal good.)

3. Suppose that your demand schedule for DVDs is as follows:

Price	Quantity demanded (Income= \$10,000)	Quantity demanded (Income = \$12,000)
\$ 8	40	50
10	32	45
12	24	30
14	16	20
16	8	12

- Use the midpoint method to calculate your price elasticity of demand as the price of DVDs increases from \$8 to \$10 if (i) your income is \$10,000 and (ii) your income is \$12,000.
- Calculate your income elasticity of demand as your income increases from \$10,000 to \$12,000 if (i) the price is \$12 and (ii) the price is \$16.

4. a) Fill up the missing values of the following table.

Q	FC	VC	TC	MC	ATC	AFC	AVC
0							
1			85				
2		55					
3			130				
4	65		160				
5		155					
6			280				
7			370				
8			480				

Good Luck!
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