

**SANGAM SKM COLLEGE- NADI**  
**YEAR 13 ECONOMICS**  
**SUPPLEMENTARY WORKSHEET 1- 2021**

**QUESTION 1**

Use the information given below and your knowledge to answer questions (i) to (iii)

The following equations describe the relationship between the prices of pencils. The quantity sellers are willing to sell and the quantity the buyers are willing to buy.

$$D = -6p + 30$$

$$S = 4p$$

Where P is the price per pencil in dollars and quantities are expressed in thousands

- i. Solve the equations to determine the equilibrium price and quantity. Show your working. **(2 marks)**
- ii. On the grid plot and fully, label the graph for the two-equation given above. **(2 marks)**
- iii. Suppose the government imposed a price ceiling of \$2 per pencil. What would be the market situation at this new price? Explain how this industry would be affected. **(1 marks)**
- iv. The government has provided a subsidy of \$5.00 to the producer. Calculate the new equilibrium price and quantity after the subsidy. **(2 marks)**

**QUESTION 2**

Study the information given below and use your knowledge to answer questions (i) to (iv).

**Schedule of Total Utility and Marginal Utility**

Packets of Bongo	Total Utility TU	Marginal Utility MU
1	20	(1)_____
2	(2)_____	15
3	45	10
4	50	(3)_____
5	(4)_____	0
6	40	(5)_____
7	35	(6)_____

**Required:**

- i) Complete the above schedule by calculating the missing figures from 1 to 6. **(3 marks)**
- ii) On the same set of x and y axes, draw the Total Utility (TU) and Marginal Utility (MU) curves. Labels the curves carefully. **(3 marks)**
- iii) State the optimal purchase rule using the standard notation. **(1 mark)**
- iv) What is consumer equilibrium? **(1 mark)**
- v) Derive a demand schedule for Bongo (Assume  $1c = 1$  utils of satisfaction) **(2 marks)**

**QUESTION 3**

The following information relates to a manufacturing business. The price of the product manufactured is \$30.00 in the market. The wages paid to the workers is \$300 each labour.

Number of Labour Employed	Output per Week	MPP	Price of a Product(\$)	MRP	Wages(\$)
1	25				
2	48				
3	65				
4	78				
5	88				
6	95				

**Required:**

1. Complete the table above. **(3 marks)**
2. How many workers should the firm hire? **(1 mark)**

**THE END**