ECO 101

QUIZ 03

TIME: 20 MIN

1. (5 Marks) The table contains Shell's daily production plan of bulbs. Fill in the missing data in the table.

L	Q	MP	TC	MC	TFC	TVC	AVC
1	23	23			70	600	
2	55	32					
3	94						
4	120	26					

2. Daphne's apparel shop produces women's accessories in a perfectly competitive market. The market price of her accessories is $9 each. She employs variable inputs like labor and raw materials to the fixed input of her small shop. Refer to the table below for the following questions:

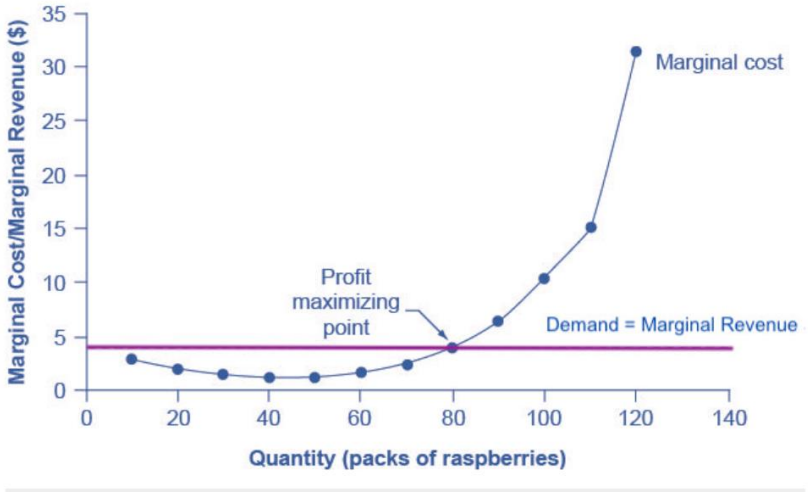
Production	TFC	TVC	TC	MC
0	5	0	5	-
1	5	6	11	6
2	5	11	16	5
3	5	13	18	2
4	5	18	23	5
5	5	25	30	7
6	5	34	39	9
7	5	49	54	15

a. (1 Marks) Use the optimal output rule to find the level of output that maximizes her economic profit in the short run.

b. (2 Marks) Calculate her economic profit or loss.

c. c. (2 Marks) What is her profit-maximizing level of output if price fell to $6? How will the price reduction affect economic profit (or loss)?

3. Consider the case of a small farmer who produces raspberries, and the market price of the raspberries is $4 per pack. Refer to the graph below to answer the following questions.



a. (2 Marks) What is the profit-maximizing output? Calculate the total revenue at the profit-maximizing output.

b. (1 Marks) If ATC was 14 at the profit-maximizing output, what is the total cost at the profit-maximizing output?

c. (2 Marks) What is the profit or loss at the profit-maximizing output?

Bonus Question for 2 Marks

What is the lowest price at which a perfectly competitive firm produces output? Explain why.