Question 1

11 points \((1 + 4 + 2 + 4)\)

(a) 1 point:

- One point is earned for stating that the firm must be covering its AVC (or TVC), or \(P > AVC\).

(b) 4 points:

- One point is earned for a correctly labeled graph with MR below the demand curve.
- One point is earned for identifying profit-maximizing quantity at \(MR = MC\).
- One point is earned for identifying price on the demand curve above equilibrium quantity and below ATC.
- One point is earned for showing the correct loss area.

(c) 2 points:

- One point is earned for indicating that total revenue will fall.
- One point is earned for explaining that demand is elastic or MR is positive.

(d) 4 points:

- One point is earned for indicating that the profit-maximizing output will increase.
- One point is earned for explaining that the marginal revenue curve will shift to the right.
- One point is earned for concluding that total cost will increase.
- One point is earned for explaining that output increases.
a) In SR, AVC should be less than P to cover accounting cost. In the case, it should shut down.

6) i) Profit maximizing price and output are P* and Q*

ii) Area of loss is rectangle P*ABC, because TR = P* · Q*, TC = Q* · A.

c) If Clark raises its price, hence its output should decrease. Monopoly is operating on its demand curve, where price elasticity is more or less equal to 1 (as MR > 0).
So, we could see from the graph, that when Q decreases, TR will decrease (from T1 to T2).
ii) As output increases, hence firm needs more labor and other inputs to produce additional output. Hence, **TFC** will definitely increase. Also, we could say that total cost curve is also a **decreasing function.** Hence, when output increases, total cost will also increase.
A) In order for Clarke to continue in the short run, he must be making enough revenue to pay for his variable costs.

B) i) if Clarke raises his prices his revenue will **increase**, however he will **experience** a decrease in demand so he may **not gain any profits**.

D) **If the demand for the product increases**

   i) **Profit-maximizing output will increase in the short run because the demand curve will shift right.**
d) ii) Total cost will increase because output increases. You are producing more, and thus it is costing more. The only time this isn't the case is when the costs are all fixed costs.
Write in the box the number of the question you are answering on this page as it is designated in the examination.

(a) Clark Electronics may want to overcome short-run losses. For an electronic company, it can improve technology. It can get better human resources. It can instantly cut the price. This attracts more demands. Because a monopoly is out of competition, improvement is needed.

(b) (i)\(\text{price}\) \[\text{profit-maximizing price}\] \[\text{area of loss}\] \[\text{output quantity}\]

(c) In short-run, total revenue increases. However, in the long run, it decreases. Demand will decrease, and supply will no longer support the amounts. If it fails, it has to shut down.

(d) (i) Output will increase. Price will increase. It will stabilize on the equilibrium with no shortage.
(ii) Total cost can be increased until it reaches out of the demand. The company can create more profits. There are ways, for example, by hiring new workers, developing better capitals, and getting better natural resources.
Clark can make investments. It creates the maximum profit by balancing toward the equilibrium. It has to minimize the loss.
Question 1

Sample: 1A
Score: 11

The student received full credit.

Sample: 1B
Score: 7

The student lost 1 point in part (b) because the area of loss is not shown. The student lost both points in part (c). In part (d) 1 point was lost because the answer does not indicate that output increases due to a rightward shift in MR.

Sample: 1C
Score: 2

The student earned 2 points in part (d) for correctly stating that output and total cost will increase.