The College Board: Connecting Students to College Success

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Question 1

13 points \((4 + 4 + 2 + 3)\)

(a) 4 points:
- One point is earned for a graph with downward sloping demand curve with MR below.
- One point is earned for showing output at MR=MC.
- One point is earned for showing price on the demand curve above MR=MC.
- One point is earned for showing the area of profit, shaded or labeled.

(b) 4 points:
- One point is earned for stating that MRP=MFC or MRP=Wage or MRP=MRC.
- One point is earned for drawing a correct graph with downward sloping labor-demand curve.
- One point is earned for drawing a horizontal labor-supply curve at the wage rate.
- One point is earned for indicating the profit-maximizing quantity of labor.

(c) 2 points:
- One point is earned for showing that labor-supply curve shifts down.
- One point is earned for showing that the amount of labor hired increases.
(d) 3 points:

- One point is earned for indicating that the total fixed cost would not change.
- One point is earned for indicating that the marginal cost would fall.
- One point is earned for indicating that the product price would fall.
Question 2

8 points (3 + 2 + 1 + 1 + 1)

(a) 3 points:
- One point is earned for identifying curve I as marginal cost (MC).
- One point is earned for identifying curve II as average total cost (ATC).
- One point is earned for identifying curve III as average variable cost (AVC).

(b) 2 points:
- One point is earned for a correct explanation for (i): increasing marginal returns or increasing marginal product (productivity) or increasing returns or specialization.
- One point is earned for a correct explanation for (ii): decreasing marginal returns (productivity) or (the law of) diminishing marginal returns or sharing of fixed inputs.

(c) 1 point:
- One point is earned for identifying the average fixed cost.

(d) 1 point:
- One point is earned for stating that the fixed cost is spread over larger quantity, so AFC decreases.

(e) 1 point:
- One point is earned for identifying K and L.
5 points (4 + 1)

(a) 4 points:
- One point is earned for correctly labeled supply and demand graphs for all three markets.
- One point is earned for showing a rightward shift of the supply curve in the wheat market with price decreasing and quantity increasing.
- One point is earned for showing a rightward shift of the supply curve in the bread market with price decreasing and quantity increasing.
- One point is earned for showing a rightward shift of the demand curve in the butter market with price increasing and quantity increasing.

(b) 1 point:
- One point is earned for concluding that the total revenue will increase.