## AP ${ }^{\circledR}$ Microeconomics 2011 Scoring Guidelines Form B

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## AP ${ }^{\circledR}$ MICROECONOMICS 2011 SCORING GUIDELINES (Form B)

## Question 1

$\mathbf{1 0}$ points $(3+1+2+2+2)$

(a) 3 points:

- One point is earned for a correctly labeled graph of the market showing a downward-sloping market demand curve, an upward-sloping market supply curve, and $\mathrm{P}_{\mathrm{m}}$ and $\mathrm{Q}_{\mathrm{m}}$.
- One point is earned for showing the firm's profit-maximizing quantity, $\mathrm{Q}_{\mathrm{f}}$, at $\mathrm{MC}=\mathrm{MR}$ with a horizontal demand curve.
- One point is earned for showing the firm's average total cost (ATC) curve tangent to its demand curve at $\mathrm{Q}_{\mathrm{f}}$.
(b) 1 point:
- One point is earned for stating that $P_{m}$ is equal to $P_{f}$.
(c) 2 points:
- One point is earned for showing a rightward shift of the market demand curve and showing $\mathrm{P}_{\mathrm{m} 2}$ and $\mathrm{Q}_{\mathrm{m} 2}$.
- One point is earned for showing the corresponding upward shift of the firm's demand curve and showing $\mathrm{P}_{\mathrm{f} 2}$ and $\mathrm{Q}_{\mathrm{f} 2}$.
(d) 2 points:
- One point is earned for stating that the number of firms increases because the existence of shortrun profits attracts new firms to enter the industry.
- One point is earned for stating that the firm's ATC curve will shift upward.
(e) 2 points:
- One point is earned for stating that the long-run profit-maximizing price will be higher than $\mathrm{P}_{\mathrm{f}}$.
- One point is earned for stating that the long-run profit-maximizing price will be lower than $\mathrm{P}_{\mathrm{f} 2}$.


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## Question 2

6 points $(3+2+1)$

(a) 3 points:

- One point is earned for a correctly labeled market graph, showing the equilibrium price and quantity, $\mathrm{P}_{\mathrm{m}}$ and $\mathrm{O}_{\mathrm{m}}$.
- One point is earned for showing a MSB curve above a MPB curve and for showing the socially optimal quantity, $\mathrm{O}_{\mathrm{s}}$.
- One point is earned for shading the area representing the deadweight loss.
(b) 2 points:
- One point is earned for showing an effective (binding) price ceiling below $P_{m}$.
- One point is earned for stating that the price ceiling will increase the deadweight loss, because providers will decrease the quantity of education offered.
(c) 1 point:
- One point is earned for stating that the new equilibrium quantity will be greater than $\mathrm{Q}_{\mathrm{m}}$.


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## Question 3

5 points $(1+1+3)$
(a) 1 point:

- One point is earned for identifying the profit-maximizing quantity of labor as 100 units.
(b) 1 point:
- One point is earned for identifying the wage rate TreeMart pays as $\$ 10$.
(c) 3 points:
- One point is earned for identifying the quantity of labor in a competitive labor market as 200 units.
- One point is earned for identifying the quantity of labor, 150 units, given a minimum wage of $\$ 12.5$.
- One point is earned for explaining that the MFC curve (or the supply curve for labor) becomes horizontal at the minimum wage up to a quantity of 150 .

