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, $P_m$ and $Q_m$.
- One point is earned for showing a MSB curve above a MPB curve and for showing the socially optimal quantity, $Q_s$.
- 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 $Q_m$. 
Write in the box the number of the question you are answering on this page as it is designated in the exam.

2A

a) \[ p \quad \text{demand curve} \quad S = MSC \]

b) (i) see the graph above.

(ii) The price ceiling increases the deadweight loss. Because of the price ceiling, the market quantity will be at \( Q_1 \) (as is shown in the graph above), which is lower than \( Q_s \) and \( Q_m \). Also, \( p_c \) is lower than \( p_m \) and \( p_s \) (socially optimal price as is shown in the graph). All this income will cause a new deadweight loss of area \( SADSc \), which is larger than original deadweight loss.

c) The new equilibrium quantity will be greater than \( Q_m \). The subsidy will shift the demand curve to the right, as can be seen in the graph below:

- The shift will result in the new equilibrium quantity \( Q_{new} \), which is greater than \( Q_m \).
Write in the box the number of the question you are answering on this page as it is designated in the exam.

b) A price ceiling will decrease the deadweight loss in the industry. It is because price ceiling can prevent the price getting too high which causes the social benefit. When price ceiling set artificially, the loss will decrease.

c) The new equilibrium quantity of college education purchased will be greater than Qm from part (a).
(b) (iii) It will decrease deadweight loss in the industry.

(c) The new equilibrium quantity will be greater than Qm.
Question 2

Sample: 2A  
Score: 6

The student answers all parts of the question correctly and so earned all 6 points.

Sample: 2B  
Score: 4

The student lost 1 point in part (a) for shading an incorrect deadweight loss area. The student lost 1 point in part (b) for stating that the “price ceiling will decrease the deadweigh [sic] loss.”

Sample: 2C  
Score: 2

The student received 1 point in part (b) for correctly drawing the price ceiling. One point in part (c) was earned for concluding that the “new equilibrium quantity will be greater than $Q_m$.”