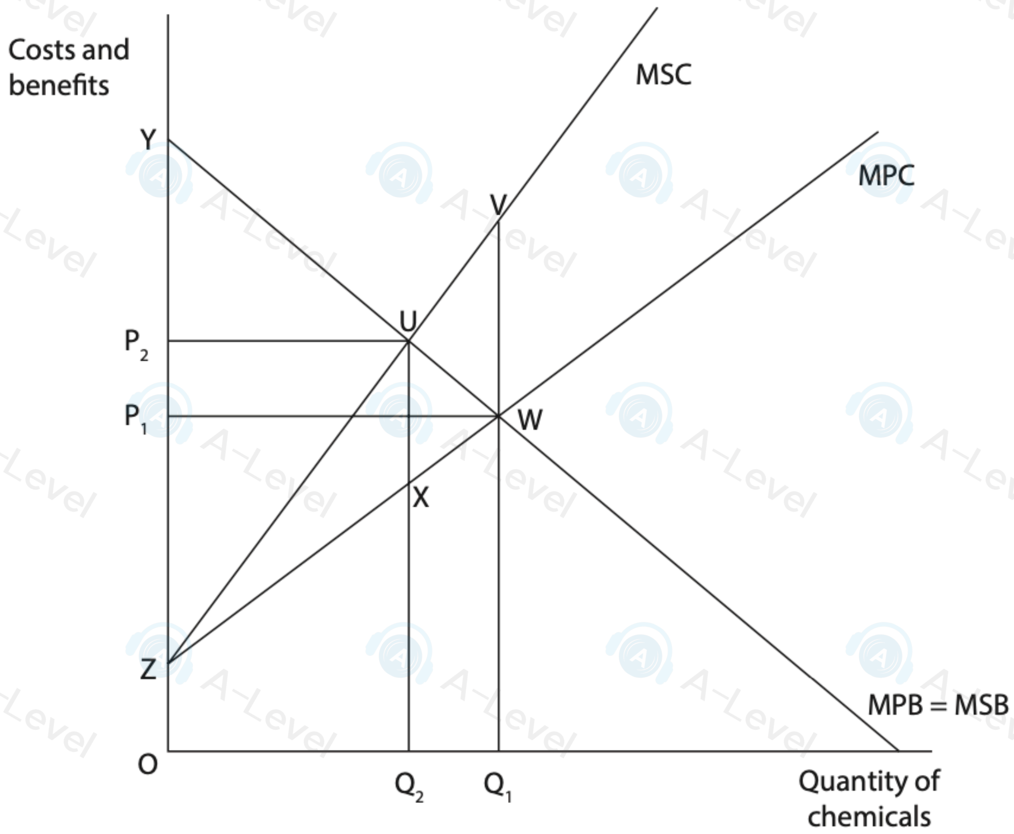
DO NOT WRITE IN THIS AREA

4 The diagram shows an externalities diagram for the production of chemicals.



Which **one** of the following shows the area of welfare loss?

☒ **A** UVW

☒ **B** UWX

☒ **C** ZP_1W

☒ **D** ZP_2U

(Total for Question 4 = 1 mark)

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2 Which **one** of the following is a function of the price mechanism?

☒ **A** To create an incentive for producers to decrease the quantity supplied when the price increases.

☒ **B** To encourage government intervention to allocate scarce resources.

☒ **C** To provide a signal to producers and consumers about changes in supply and demand when prices change.

☒ **D** To ration scarce resources by allowing prices to decrease when demand increases.

(Total for Question 2 = 1 mark)

1 Which **one** of the following is a function of the price mechanism?

☒ **A** An increase in the price of hand sanitisers, caused by an increase in demand, will ration them to those who are most able to pay

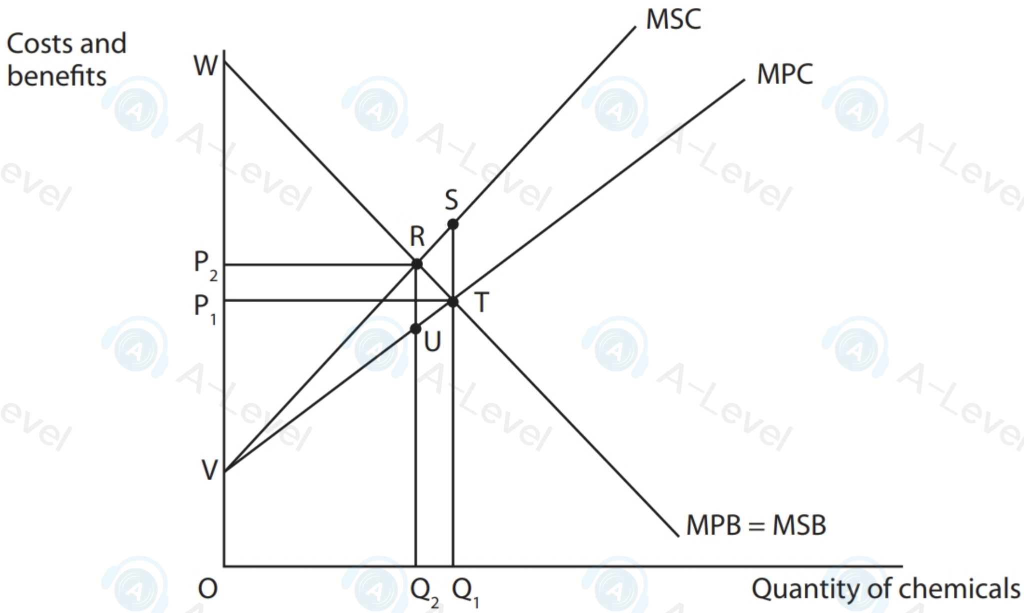
☒ **B** A decrease in the price of carrots, caused by excess supply, provides farmers with the incentive to increase supply

☒ **C** A decrease in the price of tinned meat is a signal to producers that demand for it is increasing

☒ **D** An increase in the price of petrol is a signal to the government to impose a maximum price

(Total for Question 1 = 1 mark)

4 The diagram shows the market for the production of chemicals.



Which **one** of the following can be deduced from the diagram?

☒ **A** The social optimum quantity is Q_1 and price is P_1

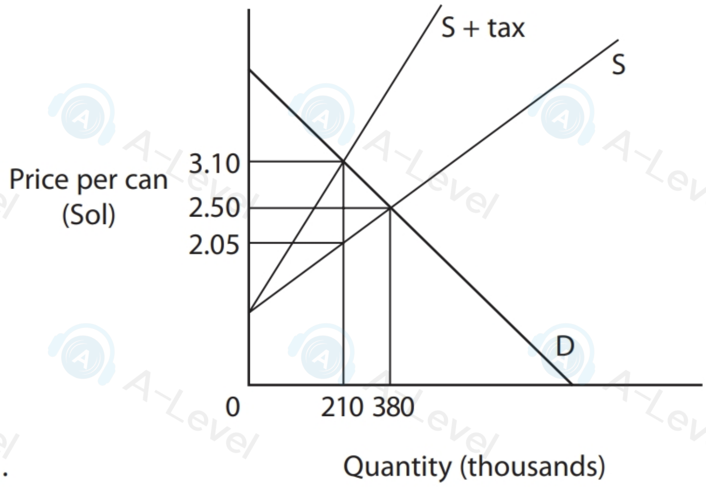
☒ **B** The market equilibrium quantity is Q_2 and price is P_2

☒ **C** The welfare loss area is RTU

☒ **D** The welfare loss area is RST

(Total for Question 4 = 1 mark)

6 The diagram shows the market for a sugar-sweetened drink in Peru. In 2018 Peru's Government imposed an ad valorem tax on sugar-sweetened drinks.

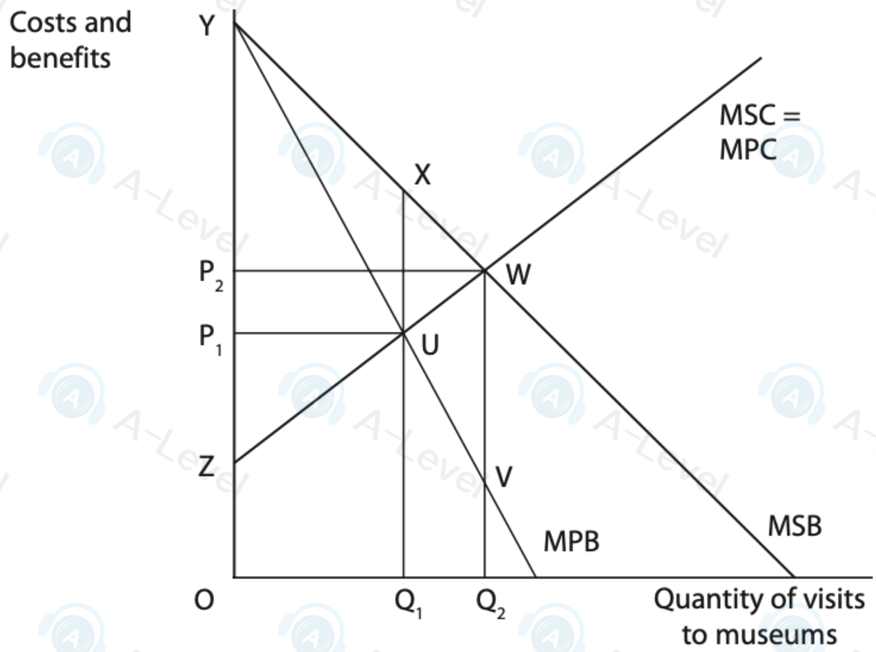


Which **one** of the following shows the value of the consumer incidence of the tax?

- ☒ **A** Sol 94 500
- ☒ **B** Sol 126 000
- ☒ **C** Sol 220 500
- ☒ **D** Sol 228 000

(Total for Question 6 = 1 mark)

4 The diagram shows the market for museum visits in Spain.



Which **one** of the following can be deduced from this diagram?

☒ **A** The market equilibrium quantity is at Q_2

☒ **B** The social optimum quantity is at Q_1

☒ **C** The welfare gain area would be equal to UVW

☒ **D** The welfare gain area would be equal to UWX

(Total for Question 4 = 1 mark)

11 Between August 2020 and August 2021 the world price of nectarines decreased from \$1.83 to \$1.42 per kg. This was caused by a good harvest in Spain, the world's largest producer.

Explain the likely impact of this change in price on consumer surplus in the market for nectarines.

Illustrate your answer with an appropriate diagram.

7 According to research, university education results in substantial external benefits. These include longer life expectancy, less crime, lower welfare payments and the adoption of new technology.

Draw a diagram to illustrate these external benefits.

11 Between August 2018 and August 2019 the world price of sweet potatoes increased from \$12 to \$22.50 per box. This was caused by Hurricane Florence and heavy rains in the USA, the world's largest supplier.

Explain the likely impact of this change in price on consumer surplus in the market for sweet potatoes. Illustrate your answer with a diagram.

9 The table shows the estimated external costs of pollution per capita in selected countries.

Country	External cost of pollution per capita ($)
Germany	950
USA	1 200
South Africa	1 300
Brazil	1 500

With reference to the table, explain **one** reason why the external costs of pollution might be different between these countries.

(Total for Question 9 = 4 marks)

9 Emiliana Lucas owns a farm in Tanzania on which she grows sunflowers. In 2020 Tania, her neighbour, started a honey bee farm. The honey bees pollinated Emiliana's sunflowers. As a result, seed production on Emiliana's farm increased from 300kg in 2019 to 620kg in 2020.

With reference to the information provided, explain the difference between private benefits and external benefits.