**Public Goods**

What is meant by a public good being nonrival in consumption?

What is meant by a public good being nonexcludable?

Explain why a public good being nonexcludable makes it difficult for markets to allocate the good.

Explain why a service such as a massage does not satisfy either characteristic of a public good.

Explain why a fireworks display satisfies to a certain extent both characteristics of a public good.

Explain why the market demand curve for a private good is constructed by summing quantities demanded across consumers at each price.

Explain why the market demand curve for a public good is constructed by summing willingness to pay across consumers at each quantity.

Explain why individual consumers can consume different quantities of the private good but are constrained to consume the same quantity of a pure public good.

Why do markets under-allocate public goods?

What is meant by underallocation - what is the relationship between SMB and SMC?

Describe how consumers may cooperate in their demands for a public good and arrive at a socially efficient allocation.

What is free riding?

How does free riding potentially undermine the cooperative solution to public goods allocation?

Explain how the free riding problem may increase with the number of people consuming the public good.