(1) Suppose that the demand and supply for my new music CD *Steve Cuellar Sings Abba’s Greatest Disco Hits* are given as follows:

\[ Q^D = 200 - 4P \]

\[ Q^S = -50 + 5P \]

Based on the question in problem set #2 where production of the CD creates a toxic emission and imposes a cost on society given by MEC = Q/5.

Pigouvian Solution

(a) Construct a Pigouvian tax that will internalize the externality and result in the efficient output.

(b) Impose the Pigouvian tax on sellers and calculate the price paid by consumers, the net price retained by sellers and the tax revenue. Show graphically and explain fully.

(c) What is the efficient level of damage resulting from playing the CD? Show graphically and explain fully.

(d) Suppose instead that the Pigouvian tax is levied on consumers and not sellers. Calculate the resulting price paid by consumers, net price retained by sellers and the tax revenue. Show graphically and explain fully.

(e) Do your answers in when consumers are taxed rather than producers? Explain.

Coasian Solution

(f) If sellers of the CD are granted the property rights to the airwaves, what is the minimum amount needed for them to reduce output to the efficient level?

(g) What is the maximum amount that third party participants would be willing to pay to reduce output?

(h) Can a Coasian bargaining solution result in the efficient output? Explain fully.

(i) If third party participants are granted the rights to the airwaves, what is the minimum amount they would accept to allow the efficient quantity of output?

(j) What is the maximum amount that CD sellers would be willing to pay to produce the CD?

(k) Can a Coasian bargaining solution result in the efficient output? Explain fully.