



Stockholm  
University

Department of Economics

**Course name:** Law and Economics  
**Course code:** EC 2105  
**Type of exam:** REGULAR  
**Examiner:** Lars Vahtrik  
**Number of credits:** 7,5 credits  
**Date of exam:** Sunday 22 February 2015  
**Examination time:** 3 hours [14:00-17:00]

**Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover).**

**Use one cover sheet per question.** Explain notions/concepts and symbols. If you think that a question is vaguely formulated, specify the conditions used for solving it. Only legible exams will be marked. Question 4 is a credit question. If you have handed in assignments during the course you may choose to answer this question anyway if you aim at a higher score. Note that in this case the score on the exam will be counted regardless of your score on the assignments!

**No aids are allowed.**

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The exam consists of 4 questions. Each question is worth 25 points, 100 points in total. For the grade E 45 points are required, for D 50 points, C 60 points, B 75 points and A 90 points.

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Your results will be made available on your "My Studies" account ([www.mitt.su.se](http://www.mitt.su.se)) on Thursday 12 March at the latest.

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**Good luck!**

## Question 1

- a) The main principle of contract law is that agreements should be enforceable. However, there are many exceptions to this main principle. Please discuss from an economic view point why certain agreements are not enforceable in most jurisdictions. The answer must include several examples of different situations when agreements are unenforceable. **(15p)**
- b) Discovery is an important part of the legal process. Please discuss how rules on compulsory and voluntary discovery and burden of proof affects the administrative and error costs in the legal system. **(10p)**

## Question 2

- a) Explain why it may not be a good idea to let the punishment for embezzlement be the maximum punishment possible (fine and imprisonment) even if this is required to deter all embezzlement in society. **(8p)**
- b) Explain why very harsh punishment combined with a low detection probability may not be an efficient deterrent for young first time offenders. Suggest a more appropriate deterrence policy for this category of offenders. **(8p)**
- c) Try to explain why a successful attempt to reduce the supply of drugs, by increasing the expected punishment for suppliers, may not be an efficient policy in the short run if your aim is to reduce drug related crimes like violent crimes, robbery and property crimes. Include the response from suppliers, drug addicts and non-addicts to the new policy in your analysis. Is there any reason to believe that the policy could be more effective in the long run? **(9p)**

### Question 3

The vaccine manufacturer ACME (A) pollutes a nearby commercial greenhouse TOMATOES (T). A could eliminate their pollution by installing special scrubbers (cleaning equipment) at a cost of 300. Similarly, T can eliminate pollution by installing filters on its ventilation system at a cost of 100. A's profit without scrubbers is 1000. T's profit is 500 with no pollution (and not installing filters), and 100 with pollution (no filters or scrubbers). Hence, in the absence of filters and scrubbers A's pollution reduces T's profits by 400.

- a) The situation is illustrated in the payoff matrix below. A and T simultaneously choose between installing scrubbers or not and between installing filters or not respectively. Suppose A has the right to pollute and assume that high transaction costs precludes a cooperative solution. What is the non-cooperative equilibrium? Indicate the solution in the payoff matrix. Is it efficient? Explain! (A's payoffs is the first in each cell) **(5p)**

		T	
		No filter	Filter
A	No Scrubbers	1000, 100	1000, 400
	Scrubbers	700, 500	800, 400

- b) Suppose a court entitles T compensatory damages from A if A pollutes without installing scrubbers (A only has to pay damages if A does not install scrubbers and T does not install filters). Redraw the above payoff matrix and find the new noncooperative equilibrium. Compare the efficiency of this equilibrium to that under a). If it is different, explain why and what this implies for efficiency. **(10p)**
- c) Let us now assume that transaction costs are low and that A and T can cooperate. Find the cooperative solutions for the cases where i) A has a right to pollute, ii) T has a right to compensatory damages (as in b)). How does efficiency differ between i) and ii) (if at all)? How does the distribution of payoffs between A and T differ between cases i) and ii) (if at all)? Explain your results and relate them to the Coase theorem. **(10p)**

#### Question 4

An investor can invest in high reliance or low reliance upon the agents future performance. The extra investment in high reliance is made outside of the contractual agreement with the agent. The payoffs for the investor and the agent with no enforceable contract are given by

		Agent	
		Perform	Breach
Investor	Invest & low reliance	0.5 0.5	-1.0 1.0
	Invest & high reliance	0.6 0.5	-2.0 1.0

The agent can appropriate the original investment but not the additional investment. As shown in the matrix the additional investment in high reliance costs equals 1. Calculate and explain the meaning of the "tipping point" or critical value of  $p$  (the probability that the agent performs). Show and explain why and when simple expectation damages may cause an inefficient outcome. Suggest a solution that guarantees an efficient outcome of the contract. **(25p)**