Department of Economics

Course name:	**Law & Economics 1**
Course code:	**EC2105**
Type of exam:	**Main exam**
Examiner:	**Lars Vahtrik**
Number of credits:	**7,5 credits**
Date of exam:	**Saturday 18 February 2017**
Examination time:	**3 hours (9:00- 12:00)**

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

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.
No aids are allowed.

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.

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 only the score on the exam will be counted regardless of your score on the assignments!

Your results will be made available on your "My Studies" account (www.mitt.su.se) on Thursday 9 March at the latest.

Good luck!

Question1

a) A government wants to create more growth in the economy and during a meeting in the cabinet the Minister of Education claims that one of the problems is the principle of "tied ownership" in the country's property laws. The Minister of Finance walks away from the meeting feeling frustrated since he has no idea what the Minister of Education means. Please explain to him what "tied ownership" refers to, what other solutions there might be and discuss benefits and drawbacks with the different solutions. **(10p)**

b) Later that day, The Minister of Finance participates in a meeting with a big firm providing services to the government and it is clear from the discussions that the parties do not agree to what has actually been agreed in a specific project. Afterwards the Minister of Finance is furious and wonder why lawyers do not write complete contracts where everything is agreed in detail. Please explain to him (when he has calmed down) how an economically interested party should think when negotiating complicated contracts and the level of detail that should be agreed. **(10p)**

c) Unfortunately the parties in **b)** cannot agree on the missing details and decide to go to court to get a ruling. How should the court determine the contents of the contract to create an economically efficient outcome? **(5p)**

Question 2

Consider a very primitive society without a state that can protect property rights. The ability to guard your property rights will then solely depend on your private military strength. Unfortunately military strength reduces the amount of resources available to productive efforts. Explain thouroughly, using game theory and efficiency arguments, why two different groups may want to establish a social contract to create a government that enforces property rights even though that means that they have to pay taxes.

Assume food production is 10 for each group with all resources allocated to food production. Without a privat army 5 units of food will be stolen and the oppurtunity cost of a private army is assumed to be 2 units of food. Also assume that you need a private army to be able to steal. The cost to the government of an army will also be 2 units of food and taxes needs to be raised to finance that army. Assume that enforcement means perfect damages in case of theft. **(25p)**

Question 3

a) Analyze the problem of a rational accountant considering to embezzle money or not. Let us assume that our accountant is undeterred by the present level of punishment. State the accountants maximization problem and explain the marginal condition (first order condition) with the help of a graph depicting the amount our accountant chooses to embezzle. **(7p)**

b) Let us now reinterpret the problem above as the number of embezzlements that our accountant will commit rather than the amount of money embezzzled. Interpret the following three changes and discusss their effect on our accountant and on the aggregate supply of embezzlements in society:

i) An increase in the slope of the expected cost of crime.
ii) A constant shift upwards in the expected cost of crime (leaving the slope unchanged).
iii) A decrease in the the slope of the benefit of crime. **(9p)**

c) Briefly discuss why optimal punishment always includes the maximum fine and why imprisonment may still be necessary in the case of our accountant. Explain why a life sentence for embezzling may not be a good idea even if this is required to deter embezzlement and even if the marginal benefit for apprehending and convicting our criminal exceeds marginal cost. **(9p)**

Question 4   (Credit Question)

a) Explain the problem of efficient precaution in tort law with the help of a graph depicting the efficient level of precaution and explain the marginal condition illustrated. **(10p)**

b) Assume that a plumber has the choice of installing a budget pipe at a cost of 2200, a safe pipe at a cost of 3200 or an extremely safe pipe at a cost of 5000 in a house. If the pipe should break the damage would amount to 600000 . In the case of the budget pipe an accident will occur in one out of one hundred installations. In the the case of the safe pipe an accident will occur in one out of two hundred installations. In the case of the extremely safe pipe an accident will occur in one out of a three hundred installations. Use your findings in **a)** to establish which pipe our plumber should choose to avoid negligence and liability for damages. **(15p)**