STOCKHOLM UNIVERSITY
Department of Economics

Course name:	**Antitrust and Regulation**
Course code:	**EC7114**
Examiner:	**Sten Nyberg**
Number of credits:	**7,5 credits**
Date of exam:	**December, 8, 2015**
Examination time:	**3 hours**

Write your identification number on each paper and cover sheet (the number stated in the upper right hand corner on your exam cover). Do not write answers to more than one question in the same cover sheet. Explain notions/concepts and symbols. Only legible exams will be marked. No aids are allowed. If you think that a question is vaguely formulated: specify the conditions used for solving it.

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. The assignment replaces question 4. If you have completed the assignment but choose to answer question 4 the best score counts.

Question 1
Suppose two competing firms A and B want to merge and that the relevant market has been determined to include 5 equal sized firms A to E.

a) Calculate the HHI for the market before the merger and the change in HHI induced by the merger (assuming maintained market shares).

b) The merger review takes into account both *unilateral* and *coordinated* effects. Explain what these terms mean.

c) Why is the increase in market concentration relevant for coordinated effects?

d) Suppose that a consumer survey reveals that the diversion ratios between firms A and B are symmetric and equal 25 percent, and that both firms' price cost margins equal 20 percent. How large would the cost efficiencies need to be to balance the upward pricing pressure?

Question 2

a) A regulated firm has accounting cost $c = \theta - e$, where θ takes values between 5 and 10. The firm's effort to reduce c, e, is associated with an effort cost $e^2/4$. The regulator can observe c but not θ or e and considers a strict price-cap regulation $p(c) = a$. Determine the optimal a if the regulator values consumer surplus more highly than profit (you may assume inelastic demand = 1).

b) Suppose the regulator can hire an inspector who could determine the true θ. How much would a firm with $\theta = 6$ be willing to pay to have information about its θ suppressed?

c) Discuss the concept of regulatory capture and the inefficiencies it entails. (What are the implications for the regulator's behavior according to Laffont & Tirole?)

Question 3
Leniency provides an incentive for firms participating in a cartel to provide information about the cartel to competition authorities.

Consider the following scenario. Two symmetric firms form a cartel and the collusive profit per firm is π^* and the competitive profit per firm is π. If neither firm applies for leniency the probability that the cartel is revealed anyway is w, and then both firms pay the fine F and damages D. If one firm applies for leniency then it does not have to pay any fine, but still have to pay damages. If both firms apply they pay F/2 in fines plus damages.

a) Express this as a normal form game.

b) Derive a condition for when applying for leniency is a dominant strategy.

Question 4 (Essay question)
A strict price cap regulation provides optimal investment incentives but may leave large rents to the firm. Yardstick competition and franchise bidding are alternative approaches that could reduce rents.

a) Explain the idea behind yardstick regulation, and how it works.

b) Explain the idea behind franchise bidding. Discuss why incomplete contracting may cause problems (Williamson's critique).

Results will be posted on your "My studies" account three weeks after the exam, at the latest.

Good luck!