

John Frederiksen

16 November 2017

Slettevang 27

2970 Hørsholm

Phone 45869556 private fixed

40138845 Mobile

66637845 Work

e-mail jfre@tdc.dk

Guidelines for the examination paper in Telecommunications Economics. Winter 2017-2018, date 22.12.2017.

Criteria for top performance in assessments of examination in 'Telecommunications Economics'.

To obtain the highest grades in the assessments of examination in 'Telecommunications Economics' the following general criteria shall be met:

The student shall

- *demonstrate knowledge of all the relevant concepts and factual items regarding the questions raised and of the relationships between these*
- *be able to design an analysis to give a thoroughly description of the problem and find possible solutions to the questions raised*
- *give a survey of the relevant economic issues regarding the questions raised*
- *explain constraints and uncertainties in the presented solutions, often in the form of trade-offs between different objectives.*

As more concrete criteria - depending on the actual questions raised in the examination - the following shall be demonstrated:

Knowledge of

- *the main trends and relationships in the ICT sectors (ICT=Information and Communication Technology) regarding demand, supply, prices, market players, technical solutions, regulation etc.*
- *the main economic and technical concepts and items used in the ICT sectors, especially for telecommunication, the Internet and supply of radio and TV channels.*

The minimum criteria for passing the examination.

The student shall demonstrate knowledge of

- *the most important concepts and factual items that are relevant for answering the questions raised*
- *the most relevant trends and relationships in the ICT sectors*
- *the possibilities and limitations of the use of relevant economic analyses.*

Acceptance of a limited amount of small and medium failures in the analysis presented, but normally no major failures can be accepted.

----- 0 -----

Question A.

There are different ways to answer the question. It is important to show an understanding and overview of different relevant concepts and to organise the presentation in a well-structured way.

The answer shall include several of the following issues:

- Describe how to define a relevant market by looking on possibilities for substitution for demand and supply.
- Present the SSNIP test.
- Present the role of market analyses in competition legislation and in the sector specific regulation. The role of EU. EU market analyses.
- Define the SMP concept.
- Give some examples of how to analyze the competition on a given market: HHI, change of customers between suppliers, entry barriers, power in negotiations of prices.
- The tools in sector specific regulation of SMP operators: non-discrimination, transparency, regulated prices (mainly for wholesale products), margin squeeze calculations.
- The tools in competition legislation of dominant companies: no predatory pricing and margin squeeze, rules for discount for bundled products etc.

Question B.

There are different ways to answer the question. It is important to show an understanding and overview of different relevant concepts and to organise the presentation in a well-structured way.

The answer shall include several of the following issues:

- ICT => increased productivity, new products, but also loss of jobs. Give some examples. Discuss the timing.
- The use of ICT in the production function in almost all sectors in society.
- New skills are necessary. How to educate the whole population.
- The digital divide.
- Changes in the types of jobs: New jobs, transformed jobs, jobs moving across borders and lost jobs.
- Consequences for the labor market, salaries, labor unions etc.
- Impact on economic growth.
- Change of possibilities and lifestyle.