

5.

**Part A: Please answer all 4 of the following questions (for 10 points each)**

1. Please explain graphically how an individual chooses his optimal amount of work time in the case where either self-employed, employed occupation, or a combination of both is possible. What is the impact of the introduction of a minimum working hours regulation (8 h) for wage-earning occupation?
2. Please show graphically and algebraically how a large importer should set the optimal tariff rate.
3. What is the land rent, and into which component parts can it be divided? What impact does a change in agricultural output prices have on the lease price of agricultural land?
4. What is the impact of an increase in the demand for rapeseed oil (e.g., due to subsidies for biodiesel) on the market for rapeseed meal (diagrams)? What is technical change (TC)? Illustrate the impact of TC using two different diagrams.

**Part B: Only 2 (two!) of the following 4 questions are to be answered (for 20 points each)**

1.
  - a) Explain the concept of Hicks-neutral technical change.
  - b) Discuss the model of induced technical change (diagram), and give illustrative examples.
2.
  - a) Introduce the concepts of technical and allocative efficiency by using the unit isoquant diagram.
  - b) Which assumption on the properties of the technology is implied by the use of the unit isoquant?
3. A pork producer who is about to purchase piglets for his operation considers the use of a hedge.
  - a) Use a simple numerical example to explain how a corresponding simple hedge would function.
  - b) Explain the importance of the maturity basis for hedging in this context. What processes ensure that the maturity basis will, as a rule, tend towards zero?
  - c) List at least two (2) reasons why the demand for futures by pork producers in Germany is relatively weak.
4. Explain the functioning of the German milk quota exchanges. Explain how price determination takes place using a diagram. Using this graph, show why the German milk quota exchange might end up with a lower traded quantity than the reference system (k-double auction). Comment on this phenomenon, and on the price corridor, in terms of the overall efficiency of the mechanism.