

Answer all the questions. Questions 1-6 are worth 1 point each (Choose only one of the options. No minus points for a wrong answer). Questions 7 and 8 are worth 6 points each. You may answer in Finnish/Swedish if you prefer. Please use easy-to-read hand-writing.

1. Which of the following is **not** true in Lewis's model

- a) Labor can be removed from the family farm with little or no cost in terms of reduced output.
- b) There is a large surplus of labor in traditional sector.
- c) The traditional sector wage may correspond to the average output of the farm.
- d) The 'wage' in the family farm is never larger than the marginal product of an additional worker.

2. Which of the following is true

- a) It is never possible to summarize inequality by a single number, which can be used to rank income distributions.
- b) The range is a measure of inequality, but it fails to satisfy the Dalton principle.
- c) If two Lorenz curves cross, the Lorenz criterion holds.
- d) Kuznets suggested the inequality is initially reduced with economic progress, but later on the inequalities increase.

3. Which of the following is **not** true of Harrod-Domar model

- a) It can be seen as an example of endogenous growth theory whereby the rate of growth is determined within the model.
- b) Capital and labor can be substituted for each other in the production technology.
- c) Savings ratio is assumed to be constant in the long run.
- d) The higher the savings ratio, the larger is the rate of growth.

4. Which of the following is **not** true

- a) Social infrastructure refers to good roads, good educational systems and for example availability of electricity.
- b) Lack of social capability (e.g. experience in the management of large-scale enterprises) is seen as a factor explaining why some countries have not been able to develop.
- c) According to some research cited in class, the style of colonization mattered to the subsequent development of the former colonies. The mortality rates of the settlers turned out to matter.
- d) Economists have done research increasingly on the role of religion, women's status and cultural attitudes on economic development.

5. Which of the following statements is **not** true

- a) Poverty line is defined in the same way in all the countries to make cross country comparisons possible.
- b) Poverty reduces people's access to credit markets.
- c) Slave diets used to exceed the level of nutrients of all 'free men' in the United States. This was because slaves could not run away to other employers after having gained more work capacity and higher productivity.
- d) Micro credits help both men and women out of poverty although they are mostly given to women.

6. There is an alternative and more efficient keyboard layout than the commonly used qwerty-keyboard. Which of the following statement is **not** true of this situation:

- a) The alternative keyboard layout has a better cost curve: for each number of people who have already adopted the system the average cost of adoption is more for the qwerty system than for the alternative system.
- b) The qwerty keyboard is a more recent innovation, which is why it has been more widely adopted.
- c) For each individual firm the cost of adopting the more efficient keyboard is higher than the cost of adopting the qwerty-keyboard. This is because other firms have already adopted qwerty-system: There are complementarities.
- d) Because the qwerty-system was historically adopted first, it is still in use, even if the reasons for its initial development are no longer there.

7. Why might you think that fertility is too high in developing countries even when people are free to choose the number of their children? What are the main reasons for high fertility in many developing countries?

8. What is the role of innovations and technological progress in economic growth (as discussed in class and in Ray)? (6 points)

Bonus question (max 1 pt):

What has been the most important new insight to you during this class?