**Technology and Economics – 2019 Spring – Fake Exam**

Name/Surname/Student ID#:

1) Financial consultancy is traditionally a labor intensive task that requires a high level of intelligence, education and experience. However, artificial intelligence (AI) and certain computer software started to conduct detailed financial consultancy, according to a report in 2017 by the magazine, the Economist, May 25th 2017. (20 p.)

a) Explain why this development could increase jobs in the financial sector according to David Autor.

b) Respond to D. Autor’s views according to Martin Ford’s views.

2. Explain how the phenomena stated below support and/or contradict the idea of technological determinism. (30 p.)

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| a) Slaves were bought and sold in the Ottoman Empire until slave trade was abolished in 1839 due to pressure from the British Empire. b) The Wright Brothers invented the first successful airplane but they also prevented all improvements in aviation technology by using their patent rights until the US government stepped in and removed all patent barriers.c) The graph on the right plots the data of average income in logarithms against level of secularity in 1910 and 1990. The straight line is the trend-line based on OLS estimation. |  |

3) Asparagus market is competitive where marginal cost of harvesting 1 kg. of crop is €4. In the EU, %40 of this cost is labor cost. Assume that the demand for asparagus is

$$Q=50-10P.$$

There is a recent automated harvesting technology which reduces the labor cost to zero, and will be sold for €16.5.

1. Would a European firm buy the harvesting robot? (15 p.)
2. In Turkey, %20 of the cost is labor cost. Would a Turkish firm buy the harvesting robot?(15p.)

4) IKEA stores have pre-specified and fixed designs. The design is similar to a maze, and the products are ordered similar to books in a library to save from labor. What do you think the engineers and designers were trying to achieve with the design similar to libraries and mazes. Discuss according to the last section of D. Autor’s paper: “Polanyi’s Paradox: Will it be overcome?”. (20 p.)