PS 1599 – Midterm

March 17, 2023

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please write your answers clearly. Be precise in your answers. No need to use all the available space if it is not needed. Irrelevant responses may lead to deducted points.

1. Technology is the only way for a country to grow economically. [1pt]

True  False

2. John Rawls believes that a policy that increases inequality should ethically be rejected. [1pt]

True  False

3. There was no technological evolution between the Neolithic and the Industrial revolutions. [1pt]

True  False

4. Robert Solow believes that conservation (e.g., of a national park) is not ethically justifiable. [1pt]

True  False

5. Summarize the two definitions of “sustainable development” that we saw in class. Indicate the weakness of one of these two definitions. [4 pts]

6. Provide one ethical case *against* and one *in favor of* the promotion of more economic growth. [4pts]

7. Why don’t firms systematically adapt to new technologies? (1) Explain what kind of technologies firms adapt to and what kind they don’t. (2) Explain what firms typically do in situations in which they fail to adapt. [4pts]

8. In a recent book by economic historian Oded Galor called *The Journey of Humanity*, the author writes (p.75): “*Nevertheless, industrialists [in the 19th century] were reluctant to fund the education of their potential workforce, as there was no guarantee that these workers would not take their newly acquired skills and find employment elsewhere*.” Question: what kind of collective action problem is this? How has the problem of providing resources for education been solved? [4pts]

9. Research and development (R&D) faces collective action failures at two levels of politics: global and local. (1) Explain the type of collective action failure in general terms and what causes it. (2) Explain the two ways in which R&D faces this type of collective action failure. (3) List one solution (as discussed in class) for each of these. [6 pts]

10. Explain the concept of “carbon lock-in” discussed in the article by Greg Unruh (2000), “Understanding Carbon Lock-in” published in *Energy Policy*. [4pts]