SS 129: Mid Term. Winter 2010 Professor Rosenthal

While taking this exam please abide by your responsibilities as laid out by the honor code
Please complete the exam in no more than two hours. Please while you are free to examine the
readings assigned for this class, please do not use outside sources (it is how you think about this
material that matters). You may sit down and take the exam at any time. It is due no later than
start of class Tuesday February 10 (typed). You may email your copy to me, or turn it in class.

3X2 pts  Complete three of four (≈100 words)
1a. What was the connection between endowments and institutions according to Engerman and
Sokoloff?
1b. Why was shipping industry a good industry to understand the pure value of mechanical
innovation?
1c. Goldin makes a big deal of the local funding for the high school movement. Why does she
think that local funding accelerates the diffusion of high schools?
1d. Why were low wages not enough to explain the location of the Cotton textile industry
according to Clark?

8pts  Complete one of two (≈350 words)
3a. Olmstead Rhode made a big deal of the natural obsolescence of agricultural technology. Is
there a similar phenomenon for mechanical technologies, or is the process whereby old
techniques are abandoned radically different? Why.
3b. Karl Max viewed the process of technical change as one that replaced skilled workers with
machines? Are there industries where that was true? Are there others where skills and
technologies were more complimentary?

11pts  Complete one of two (≈500 words)
4a. Summarize the transformations of inventive activity in the United States between 1800 and
1930, then discuss what factors you think were central to such an evolution? Based on that
history, what policies would you recommend to a developing country that wants to achieve
high rates of innovation over the long term?
4b. Given the natural depreciation of biological innovation, should attempts at harnessing solar
energy today focus on biological converters (e.g. grasses) or mechanical ones (solar panels or
other devices)? Suggest how you would make the decision.

END