Instructions. Please submit only one paper per group, via Blackboard. Please make sure that the printed output of your files is intelligible. Notice: the digital version of this document features links to webpages.

1. Labor market theory. As background to a consulting assignment, you have been asked to work through an analytical example to illustrate in concrete terms the impact of minimum wage legislation on employment and unemployment. For simplicity, you assume that demand for labor is described by the function $L^d = (\frac{2}{3}w)^{-3}$, where $w$ denotes the wage rate. The supply of labor rises with the wage: $L^s = w^2$.

(a) Describe, first, how the labor market might work in this economy if the market is unregulated. What is the wage? Employment? Unemployment? (10 points)

(b) Now consider the effect of introducing a minimum wage $w_m$. What are total employment and the unemployment rate if $w_m = 1$? If $w_m = 0.5$? How does this market differ from the one above? How much would an unemployed person be willing to pay a recruiter to find a job? (10 points)

(c) Consider briefly the recent hike in the federal minimum wage in the United States. Do you believe it is going to have a sizeable effect on the unemployment rate? And on the employment rate? Why? Can you point to other likely macroeconomic consequences of the increase in the minimum wage? (10 points)

2. Trade liberalization. You were asked to explain to an audience of consultants why trade liberalization is a win–win: why all countries can benefit. You realize that they want to believe in free trade because their clients do, but like many people around the world they don’t quite believe it themselves. You decide that the best approach is to construct a numerical example.

You tell a story about Sweden (country 1) and Romania (country 2), each of which produces cellular phones and shirts by means of labor. Their productivity levels in the two activities are reported in the table below. (One unit of labor produces 5 cell phones in Romania, ...)
For the sake of the example, you assume that product and labor markets are competitive in both countries and each has a total of 100 units of labor.

(a) You start by illustrating the case of no trade. You compute the relative price of shirts to cell phones in each country and draw their consumption possibilities frontiers. (10 points)

(b) Next you show that if the two countries allow trade, each will benefit from specializing (Sweden in cell phones and Romania in shirts) as long as the the wage rate in Romania relative to Sweden falls in a given range. What is that range? Please explain why residents in both countries are better off than with no trade. (10 points)

(c) Lobbyists for the textile industry in the Sweden have been arguing that competition from developing countries such as Romania is unfair because it is supported by extremely low wages. Show that if wages in Romania approached Sweden levels, trade would stop altogether. Show, in addition, that this outcome would leave both Romanian and Swedish residents worse off. (20 points)

3. Labor market practice. Your first day on the job at General Electric, you are given 4 hours to prepare a 5-minute presentation to your group summarizing the labor market issues a manufacturer would face in Australia, Mexico, and the Czech Republic. Once you get over your initial panic, you contact your Global Economy professor, who suggests you look at:

- The Statistical Annex to the latest OECD Employment Outlook
- The World Bank’s Doing Business (esp the part dealing with hiring and firing workers)
- World Development Indicators (esp the information on the education on the labor force).

You quickly turn this data into a series of charts and bullet points that highlight the salient differences across these countries. (30 points)