

Part one:

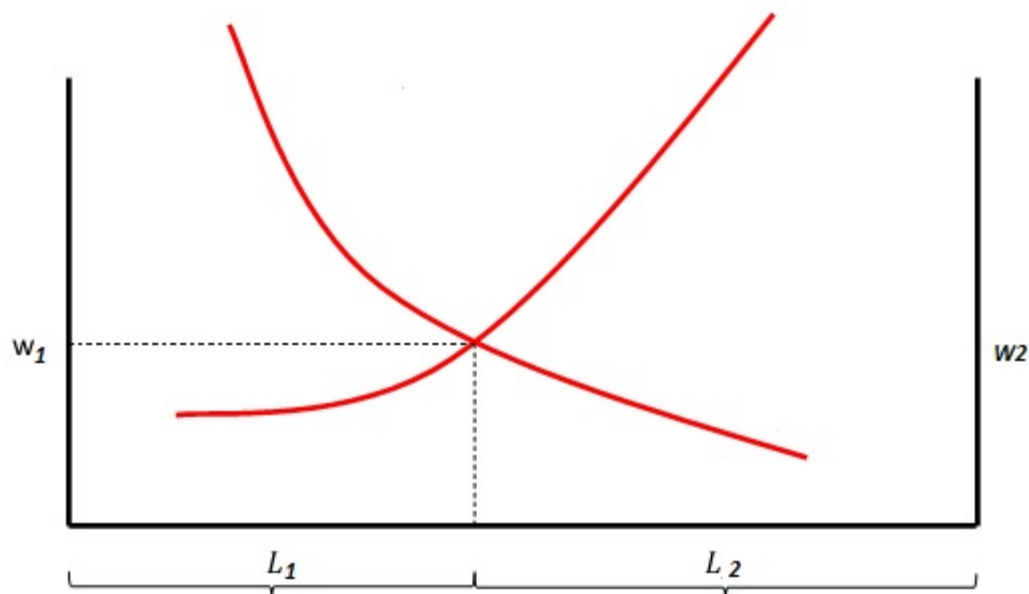
Evaluate each sentence. 8 marks each.

- 1) A monopsonist pays every employee his or her marginal value
- 2) To decide whether one must invest in a higher education, one must only look at the education equation.
- 3) A car thief can live comfortably from stealing cars 40 hours a week. Suddenly he needs more time to steal the same amount of cars in 40 hours (he needs more time per vehicle). Does the thief need to work more hours to attain the same amount of comfort as before?
- 4) Which one of Marshall's rules suggests why labor demand should be relatively inelastic for public school teachers and nurses? Explain.
- 5) There is a market with low-skilled and high skilled employees, both have a perfectly inelastic supply. What happens when supply of high-skilled employees grows, supply of low-skilled employees drops and wages of low-skilled employees drop.

Part two:

Labor supply is perfectly inelastic. These are 2 sectors, with each its own labor demand and supply.

- 1) Using the following graph show what happens to the wage and division of labor when there is a technological advance in Sector 1. [10 marks]
- 2) Use the same graph to show what happens when there is a binding minimum wage in Sector 2. [10 marks]
- 3) What would happen with the wages and amount of labor in each sector when there is a flood of migration that is also perfectly inelastic and that divides itself equally over both sectors evenly. [10 marks]



Part 3:

“The roots of education are bitter but the fruit is sweet” (Aristotle)

- If you would be Jacob Mincer, would you agree with the quote above? Yes or no. [2.5 marks]
- If you would be Jacob Mincer, what would be your interpretation of the coefficients on the education and experience variables in the following result table: [7.5 marks]
- As an econometrician, what concerns would you have about the estimated return to education in the results table above? [10 marks]
- If in the results table above experience is defined as potential experience (i.e. $\text{experience} = \text{age} - \text{education} - 6$), the point estimates on experience could be capturing an age profile instead of an experience profile in wages. Explain why this is an important concern. Is there any way in which we could test which of these two hypotheses is more important in the data? [10 marks]

Source	SS	df	MS	Number of obs = 3010		
Model	172.16563	6	28.6942716	F(6, 3003)	=	204.93
Residual	420.476016	3003	.140018653	Prob > F	=	0.0000
Total	592.641646	3009	.196956346	R-squared	=	0.2905
				Adj R-squared	=	0.2891
				Root MSE	=	.37419

Log(wage)	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
education	.074009	.0035054	21.11	0.000	.0671357	.0808823
experience	.0835958	.0066478	12.57	0.000	.0705612	.0966305
experience ²	-.0022409	.0003178	-7.05	0.000	-.0028641	-.0016177
_cons	4.733664	.0676026	70.02	0.000	4.601112	4.866216