



**DEPARTMENT OF ECONOMICS AND ECONOMETRICS**

## **ECONOMICS 2F**

**FINAL ASSESSMENT: MAY 2016**

**APK CAMPUS**

**DATE: 30/5/2016**

### **ATTENDANCE SLIP**

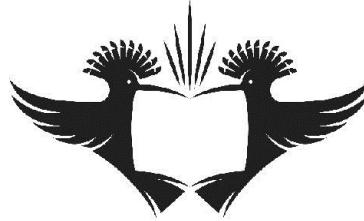
**Surname:** .....

**Initials:** .....

**Student number:** .....

**Cell number:**.....

**This paper consists of 16 pages.**



UNIVERSITY  
OF  
JOHANNESBURG

**DEPARTMENT OF ECONOMICS AND ECONOMETRICS**

## **ECONOMICS 2F**

**FINAL ASSESSMENT: MAY 2016**

**APK CAMPUS**

**DATE:** 30 MAY 2016

**MARKS:** 100

**TIME:** 2 HOURS

**ASSESSORS:** Dr K Viljoen

**MODERATOR:** Prof G van Zyl

SURNAME	
INITIALS	
STUDENT NUMBER	
CELL NUMBER	

### **Mark schedule**

Section A		Section B							
	Mark		Mark		Mark				
		Q1		Q2		Q3		Q4	
MC[20]		1.1 [8]		2.1 [4]		3.1 [6]		4.1 [4]	
		1.2 [4]		2.2 [5]		3.2 [4]		4.2 [5]	
		1.3 [4]		2.3 [3]		3.3 [5]		4.3 [3]	
		1.4 [4]		2.4 [6]		3.4 [5]		4.4 [5]	
				2.5 [2]				4.5 [3]	

**Total mark :**

Student Number.....

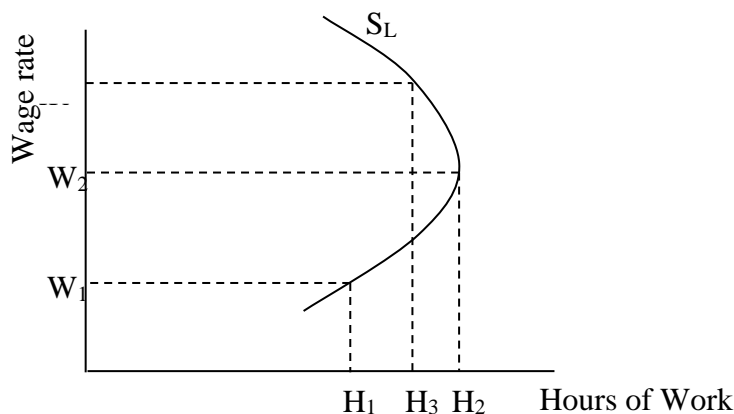
## Section A: Multiple choice questions

[20]

Answer the multiple choice questions on the attached answer sheet on page 15:

1. Which one of the following topics is most suited to microeconomic analysis?
  - a. The average level of real wages
  - b. The unemployment rate
  - c. The average level of labour productivity
  - d. Mobility and migration decisions
  
2. Assume that all workers are equally productive, but that male wages are R14 and female wages are R10. An employer who employs only male workers has a discrimination coefficient of:
  - a. at most 0.4
  - b. at least R4
  - c. at most R4
  - d. at least 10/14
  
3. In a particular family, both spouse A and spouse B could earn R80 per hour in market work. However, spouse A has a comparative advantage in the production of home-produced goods. Becker's model of time allocation predicts that:
  - a. spouse B will be better able to substitute time for goods in the production of commodities
  - b. spouse A and spouse B will divide market work and home production equally
  - c. spouse A will tend to specialize in market work; spouse B in home production
  - d. spouse A will tend to specialize in home production; spouse B in market work
  
4. The convex shape of a standard indifference curve reflects:
  - a. a diminishing marginal rate of substitution of leisure for income
  - b. an increasing marginal rate of substitution of leisure for income
  - c. a constant marginal rate of substitution of leisure for income
  - d. the wage rate

Questions 5-6 are based on the following diagram, which shows a labour supply curve for an individual.

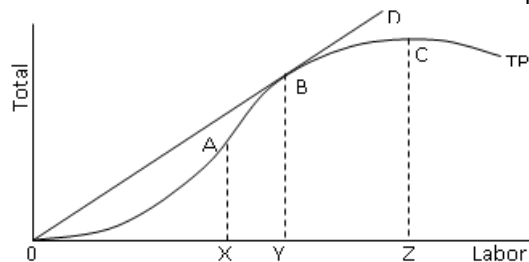


5. If the wage rises from  $W_1$  to  $W_2$  we may conclude that:
  - a. the income effect is stronger than the substitution effect
  - b. the income effect and substitution effects are equal
  - c. the substitution effect is stronger than the income effect
  - d. labour supply is perfectly inelastic

Student Number.....

6. If this person were now willing to supply only  $H_1$  hours of work at  $W_3$ , we could conclude that:
- labour supply increased (the curve shifted to the right)
  - labour supply decreased (the curve shifted to the left)
  - the person's preferences must have changed
  - the substitution and income effects are now equal
7. Which one of the following would be most likely to shift the labour supply curve to the right?
- A decrease in the wage rate
  - A change in the indifference map following deterioration of working conditions
  - A change in the indifference map following an improvement in working conditions
  - A significant increase in dividend and interest income
8. Which one of the following would indicate a profitable human capital investment?
- The net present value is  $-R12,000$
  - The interest rate on borrowed funds is 4% and the rate of return is 3%
  - The interest rate exceeds the net present value
  - The rate of return exceeds the interest rate on borrowed funds
9. If capital and labour are gross complements, an increase in the cost of capital will:
- increase the supply of labour and drive the wage down
  - decrease the demand for labour and drive the wage down
  - increase the demand for labour and drive the wage up
  - either increase or decrease the demand for labour depending on whether the substitution effect or the output effect is stronger

Questions 10 and 11 are based on the short-run production function in the following graph.

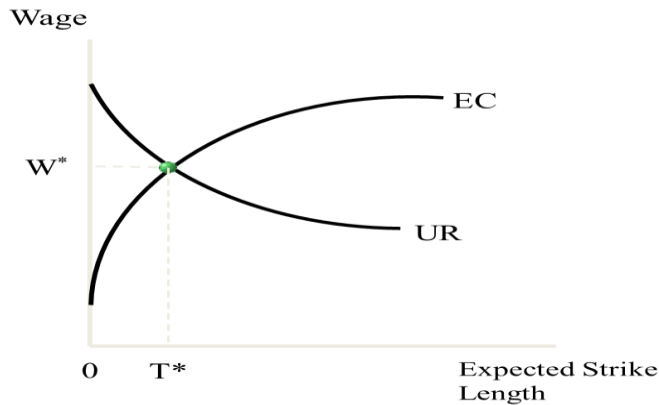


10. For labour input levels between X and Y:
- the marginal product of labour is falling, but is greater than the average product of labour
  - both the marginal product and the average product of labour are falling
  - the marginal product of labour is rising and the average product of labour is falling
  - both the marginal product and the average product of labour are rising
11. The "law of diminishing marginal returns" begins to take effect at labour input level:
- 0
  - X
  - Y
  - Z
12. If MRP of labour at a firm is R5 an hour, and the wage is R4 an hour, what should the firm do?
- Hire more workers
  - Fire more workers
  - Stay at the current level of employment
  - Cut back on hours of work
13. "The industry mix of national output has changed from manufacturing to services." This fact is most consistent with the:
- managerial-opposition hypothesis
  - union-growth hypothesis
  - structural-change hypothesis
  - substitution hypothesis

Student Number.....

14. With perfect income equality the Gini coefficient in a country would be
- infinity
  - 1
  - 0.5
  - 0

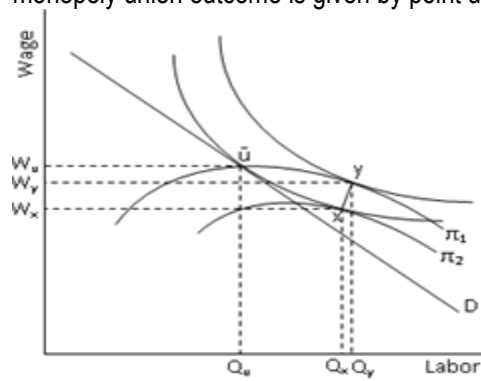
Questions 15 and 16 refer to the following diagram, in which EC is the employer concession curve and UR is the union resistance curve.



15. If both the union and the firm know the shape and position of the other's concession curve, then:
- a strike of length  $T^*$  will occur
  - the parties will agree on a wage of  $W^*$
  - both a. and b. are correct
  - neither a. nor b. are correct
16. The model assumes that, as the expected length of a strike increases:
- union wage demands fall and firm wage concessions increase
  - union wage demands increase and firm wage concessions decrease
  - uncertainty about the union's resistance and the employer's concessions increases
  - uncertainty about the union's resistance and the employer's concessions decreases
17. Which of the following is not a source of wait unemployment?
- Temporary layoffs
  - Union job queues
  - Efficiency wages
  - Changes in the structure of the economy
18. Which of the following is a true statement regarding most countries' earnings distribution?
- Because the distribution is skewed to the right, the mean exceeds the mode
  - Because the distribution is skewed to the right, the mode exceeds the mean
  - Because the distribution is skewed to the left, the mean exceeds the mode
  - Because the distribution is skewed to the left, the mode exceeds the median

Student Number.....

Questions 19 and 20 refer to the following graph, in which  $\pi_1$  and  $\pi_2$  are a firm's isoprofit curves. The monopoly union outcome is given by point  $\bar{u}$ .



19. An efficient labour contract entails

- a point on the labour demand curve corresponding to a wage of  $W_x$
- a point on the labour demand curve corresponding to a wage of  $W_y$
- a wage of  $W_u$  and employment of  $Q_x$
- wage and employment levels along the line  $xy$

20. Compared to the monopoly union outcome, wage and employment contracts along the bargaining curve between  $x$  and  $y$  entail:

- higher utility to the union and higher profits to the firm
- higher utility to the union but lower profits to the firm
- higher profits to the firm but lower utility to the union
- lower utility to the firm and lower profits to the firm

Student Number.....

**Section B:**

**Question 1: Introduction, supply, demand and quality of labour.**

**[20]**

1.1 Discuss the importance of "Labour Economics" in terms of the following aspects:

(8)

- i) labour's unique characteristics
- ii) Price (total cost) of labour
- iii) Demand for labour
- iv) Institutional factors that impact on labour

i) Unique characteristics of labour

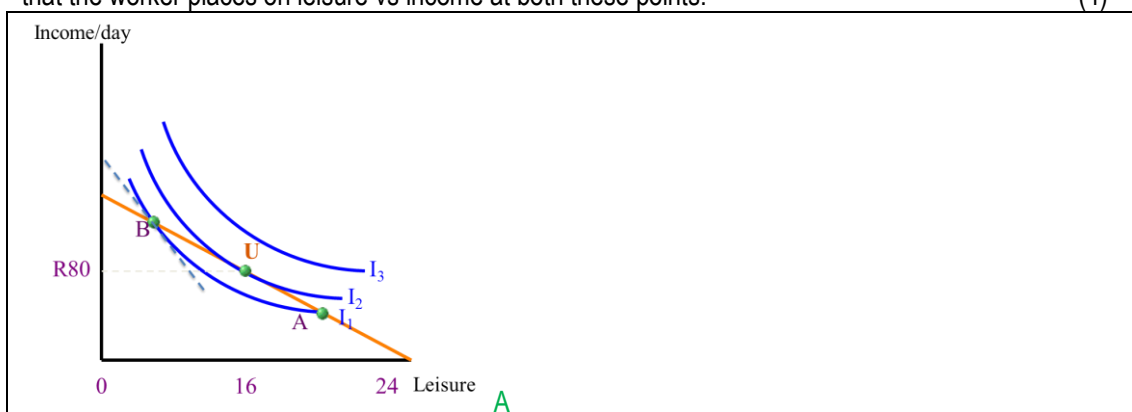
ii) Price (total cost) of labour

iii) Demand for labour

vi) Institutional factors

Student Number.....

1.2 Consider the following figure. The worker maximizes its utility at point U and not at point B and point A. Discuss the relationship between the MRS and wage rate at point B and point A, as well as the value that the worker places on leisure vs income at both these points. (4)



Question	At point B	At point A
Relationship between the MRS and wage rate		
Value of leisure vs income		

1.3 The business cycle has 2 offsetting impacts on participation namely the “added worker effect” and the “discouraged worker effect” Explain what each of these refer to as well as the reasons for it to occur. (4)

<b>The added-worker effect:</b>	<b>The discouraged-worker effect:</b>

1.4 There are 220 million inhabitants in Fantasia of which 200 million are between the age of 15 - 64 (who are non-institutionalized (i.e., not prison, mental institution, etc.). Some have jobs, and others don't; some are searching for jobs, and others aren't. See the information below: (4)

Have jobs and are not searching for different jobs	90 million
Have jobs but are searching for different jobs	35 million
Do not want to work	50 million
Do not have jobs but are searching for jobs	25 million

From the information provided in the table below, calculate the:

i) Number of unemployed	
ii) Labour force	
iii) Labour force participation rate	
iv) Absorption rate	

Student Number.....



**Question 2: Wage Determination and the Allocation of Resources****[20]**2.1 Illustrate and explain how the **demand curve** for **human capital** is derived.

(4)

2.2 Use the information in the table below, and calculate the MRP and the VMP for the firm (in the last two columns). Explain what the “hiring rule” is then illustrate and explain this firm’s short run demand for labour using the “hiring rule”. (5)

Units of Labour	TP	MP	P=MR	TR	MRP	VMP
0	0					
1	5	5	200	1000		
2	9	4	200	1800		
3	12	3	200	2400		
4	14	2	200	2800		
5	15.5	1.5	200	3100		
6	16.5	1	200	3300		
7	17	0.5	200	3400		

Student Number.....

2.3 Illustrate and explain what influence a rise in the productivity of workers will have on the demand for labour. (3)

2.4. Most people prefer to work in a safe working environment but for some firms it is very costly to provide job safety. These firms usually have a shortage of labour.


i) Explain how the firms can attract more labour.

ii) Illustrate and explain the hedonic theory of wages and how it manage to fit the risk averse workers to the saver jobs and the risk lovers to the jobs with higher risks. (6)

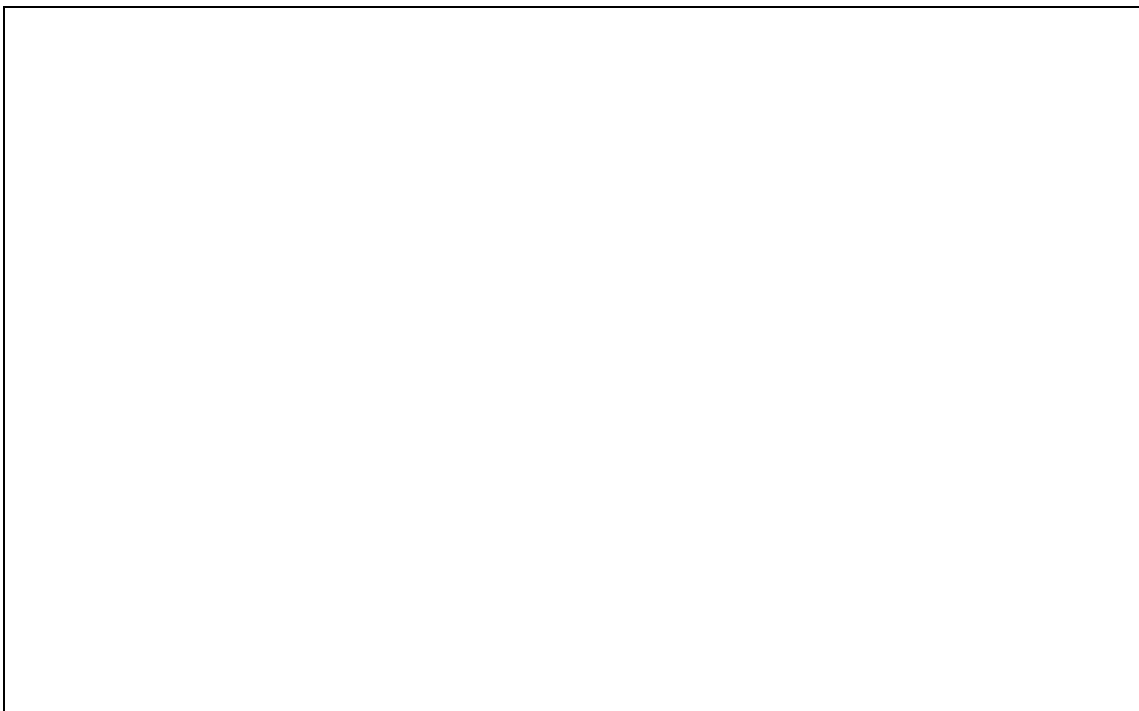
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3.2 South Africa's trade unions are in crisis. Currently only one in four workers (25.5% of the workforce) is unionized, and this figure is declining slowly but steadily. One of aims of unions is to raise the wages of their members. Unions can increase the wages of their members by increasing the demand for union labour, restricting the supply of labour and by bargaining for an above equilibrium wage. Illustrate and explain how unions bargain for an above-equilibrium wage. (4)



3.3 Illustrate and explain the monopoly union model, using union indifference curves and the demand for labour curve. Clearly distinguish between the role of the union and the role of the firm in wage and employment determination. (5)



Student Number.....

3.4 Discuss five negative effects of unions on efficiency and productivity. (Also give examples) (5)

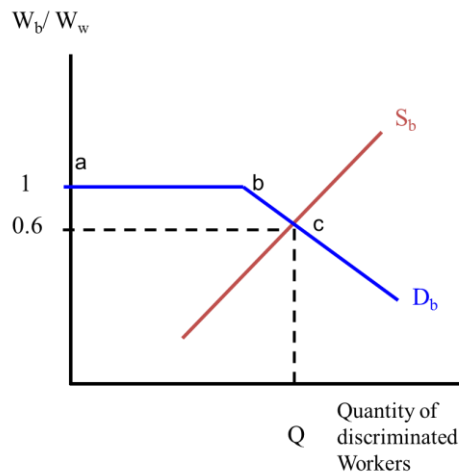
**Question 4: Labour Market discrimination, employment and unemployment [20]**

4.1 Explain what each of the following types of discrimination refers to and give examples where possible. (4)

Type of discrimination	Explanation
Wage discrimination	
Employment discrimination	
Occupational job discrimination	
Human capital discrimination	

Student Number.....

4.2 Consider the following figure, which illustrates the wage discrimination and discrimination coefficient, and answer the questions that follow: (5)



Question	Answer
1. Does the horizontal portion of the demand curve represents the (non-discriminating employers or discriminating employers or both employers)?	
2. The quantity supplied of workers who are discriminated against rises as the discriminated-non-discriminated wage ratio (rises, fall or stay constant)	
3. If the wage of discriminated workers is R24, what is the wages of non-discriminated workers?	
4. What is the wage difference?	
5. On which segment of the D <sub>b</sub> curve will the firm hire workers who are discriminated against?	

4.3. Discuss three non-discriminatory factors that contribute to gender and racial differences in labour markets (3)

Student Number.....

4.4 Define the official / strict / narrow unemployment as measured by the South African Quarterly Labour Force Survey. (5)

4.5 Explain what frictional unemployment entails. (3)

Student Number.....

### **SECTION A - Answer Sheet**

Indicate the correct option with an **X (in pen)**

(Remember to write your student number on the bottom of this sheet as well)

	[a]	[b]	[c]	[d]
Question				
1				
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