



**UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL**

**FINAL EXAMINATION
MARCH 2025 SEMESTER**

COURSE CODE : EGB10803
COURSE NAME : LABOR ECONOMICS
PROGRAMME NAME : BACHELOR OF SCIENCE (HONOURS) IN
ANALYTICAL ECONOMICS
DATE : 3 JULY 2025
TIME : 9.00 AM – 12.00 PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please **CAREFULLY** read the instructions given on this question paper.
 2. This question paper has information printed on both sides of the paper.
 3. This examination comprises **TWO (2)** sections
 4. Answer **ALL** questions in **Section A** and choose **ONLY TWO (2)** questions in **Section B**.
 5. Please write your answer in the answer booklet provided.
 6. All questions must be answered in **English** (any other language is not allowed).
 7. This question paper must not be removed from the examination hall.
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THERE ARE SIXTEEN (16) PAGES OF QUESTIONS, INCLUDING THIS PAGE.

Section A (Total: 30 Marks)

INSTRUCTION: This section comprises 30 multiple choice questions and each question is worth 1 mark. You are required to answer **ALL** questions in this section in the **answer booklet** provided.

1. Suppose that a firm wishes to shift its production method to become more labour intensive. If this shift is represented in the isocost-isoquant schedule, this means that _____.
 - A. the isocost line is going to go outward to a different line
 - B. the isoquant curve is going to move upward to a different curve
 - C. the isocost line is leaning towards labour on the same line
 - D. the isoquant curve is going to move downward along the same curve

2. Consider a firm is leasing its machinery through a borrowing term from the bank. If the market interest rate increases, what should the firm do to maximise its profit through its production of output?
 - A. Lean towards having more labour in the production
 - B. Maximise further on the utilisation of capital
 - C. Lay off workers and focus solely on capital-intensive production approach
 - D. Increase for more production to combat the effects of increasing interest rate

3. Suppose that there is a medium-sized manufacturing plant and the manager of the plant realises that there is a sudden increase in demand for the product that the firm is manufacturing. Currently, the production in the plant has reached its capacity but the manager is forced to boost production by hiring workers to meet the market demand.

From the passage above, what would be the economic implication if there are new workers hired while the present operation is at reach?

- A. The workers might be on a strike as their wage rate has fallen
 - B. The burden of average product per labour is going to be alleviated
 - C. The marginal output produced by newly hired workers will be negative
 - D. The total production of output will further increase
4. If a person has zero non-labour income and he prefers to spend his day with more of leisurely activities, his indifference curve would be _____.
- A. tangent to the isocost line
 - B. tangent to the isoquant curve
 - C. gravitating towards leisure
 - D. gravitating towards spending more hours on working
5. Since the marginal product of labour is given as $\frac{w}{p}$, if there is an increase in price of the output in the economy, the labour supply will _____.
- A. shift to the right
 - B. shift to the left
 - C. be vertical
 - D. be horizontal

For questions 6-10, refer to figure 1 below.

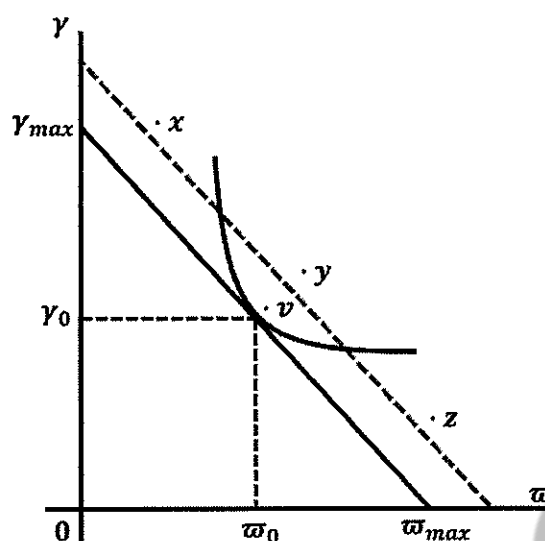


Figure 1

Figure 1 shows a schedule of an indifference curve and a budget line of an individual for a decision that will maximise her utility in order to find her optimal work-life balance. Assume that the person knows exactly what her preference is, and the figure above is the visual representation of such a preference.

6. Under the theory of labour-leisure trade off, her utility is maximised at point _____.
- | | |
|--------|--------|
| A. v | C. y |
| B. x | D. z |
7. Which of the following answers is predictably **TRUE** regarding this person based on the diagram shown above?
- She is currently hustling as most of her time spent is on working almost all day long with minimal rest
 - She is currently enjoying her fruit of labour as she prioritises leisure over working overtime
 - She has a well-balanced adult life as she is dividing her time for leisure and working accordingly
 - She needs not to work because she is a daughter of a financial tycoon which she still earns even though she is not working

8. Which of the following answers is **CORRECT** in terms of point x ?
- A. It is the point that the individual would be if she wants to have a well-balanced lifestyle
 - B. This point represents the willingness for the individual to work for a multinational corporation (MNC) as she enjoys working so much
 - C. It is the point that shows her utility level as she figures on how her satisfaction can be further improved
 - D. It is the point that has the same value with points y and z if her income increases from what is currently earned
9. Which of the following answers is **INCORRECT** in describing point ω_{max} .
- A. The individual would have to earn no income as she has exhausted all hours only for leisure
 - B. This is the point that will maximise her income as she is earning her pension already
 - C. The individual does not have non-labour income to be well-off at this point
 - D. The individual would have strictly preferred to leisure around and no other thing is worthy
10. Suppose that the income of this person has increased and it is represented by the dashed line in figure 1. As a result of this income increase, she actually wants to work less hours and spend a lot of her time onto things other than working. Which of the following points remarks this change of preference?
- | | |
|--------------|--------|
| A. y_{max} | C. y |
| B. x | D. z |

11. A vertical labour supply indicates _____.
- A. that firms in that industry is powerful enough to fix their market for employment at a certain level
 - B. there is a wage level independency
 - C. the population in that particular area would like to work in that industry only
 - D. an increase in wage rate causes for more employment supplied in the labour market
12. KWSP is Malaysia's retirement fund scheme or EPF, and it has been constituted that every employer on a registered entity named as company must contribute monthly to its employees' accounts. This renders KWSP as a form of _____ for Malaysian employees.
- A. mandated benefit
 - B. payroll subsidy
 - C. tax relievable benefit
 - D. worker's right

For questions 13-18, refer to figure 2 below.

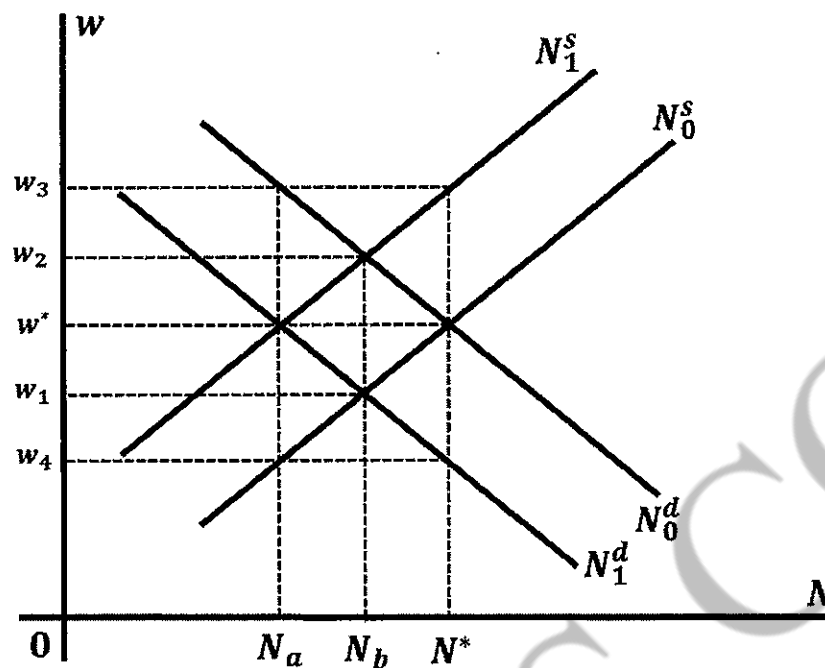


Figure 2

Figure 2 is a representation of a labour market in a specific industry on which the initial equilibrium in this market is at (N^*, w^*) or as curves N_0^d and N_0^s intersect. Each question always begins with this initial point of equilibrium unless stated otherwise.

13. Suppose that there is a pre-disposed health hazard that the workers have never known, and the workers are now just informed regarding this issue as their health are now compromised. Which of the following answers indicates the probable equilibrium in the labour market structure in response to the information provided?

- | | |
|---------------|---------------|
| A. N_a, w^* | C. N_b, w_1 |
| B. N_b, w_2 | D. N^*, w_3 |

14. Consider that the government introduces a new scheme of taxation such that the firms are to facilitate the payroll tax for every worker employed. Which of the following answers below would best describe the next **PROMPT** course of action of the firms?
- A. Firms will impose an employment reduction using voluntary separation scheme (VSS) which will result in the leftward shift of the labour supply from N_0^s to N_1^s .
 - B. Firms will have the labour demand maintained at N^* and will also remain paying workers at w^* as the tax does not bother the employers.
 - C. Firms would have to resort to paying workers at w_4 and the employment level will reduce to N_a , as $w^* - w_4$ is the total tax payment that the employers pay.
 - D. Firms will maintain employment at N^* but the wage rate paid to the workers will fall to w_4 to accommodate for the payroll tax imposed by the government.
15. If the government imposes a form of income taxation that is enforceable on workers and not on firms, which of the wage rate in figure 2 will the workers receive after labour market adjustment from the initial equilibrium?
- A. w_4
 - B. w_3
 - C. w_2
 - D. w_1
16. If a firm is imposed with payroll taxes by the government, what will be the equilibrium employment and wage, as well as the true cost of paying payroll taxes to the government?

	Equilibrium employment and wage	True cost of wage (inclusive of taxes paid to the government)
A.	N_b, w_1	w_2
B.	N_b, w_2	w_2
C.	N_a, w^*	w_1
D.	N_b, w_1	w_4

17. If the workers are imposed with income taxes by the government, what will be the equilibrium employment and wage, as well as the true wage received after paying income taxes to the government?

	Equilibrium employment and wage	True cost of wage (inclusive of taxes paid to the government)
A.	N_b, w_1	w_1
B.	N_b, w_2	w_1
C.	N_a, w^*	w_2
D.	N_b, w_1	w_2

18. Suppose that on another perspective, the final equilibrium would be at point (N_a, w^*) , what could be the best scenario leading to this equilibrium from the point of origin at (N^*, w^*) based on the answers below?
- A. The firm is operating in a country that its population is undergoing a genocide by occupying forces, thus the scarce resources reduces both labour demand and supply
- B. The workers voluntarily exit the labour market because they want to retire early, such that the labour demand also shifts to left because of this factor only, ceteris paribus
- C. The country with which the firm operates is running a subsidy program at which more workers are laid off and the firms are only providing new wage structures to the available workers
- D. None of the above

19. If a form of mandated benefit is well received by the workers in a particular company, what is the probable effect in the labour market equilibrium?
- A. The cost of the company will be even higher as the firm has to bear with the positive response by the workers.
 - B. Workers will receive lower benefit in total although the level of employment reduces further than it should have been.
 - C. Firms will have to experience a lower cost of paying wage as it has been internalised by the positive reaction by the workers.
 - D. Workers are going to be happy as they will get even larger benefit on top of the mandated benefit required for the firms to provide.
20. A firm whose market structure is the only buyer of a commodity, with the commodity turns out as the labour used in production. The firm intentionally pays workers based on the length of employment for which senior workers are paid higher than of those who just joined the firm.
- This is a situation where the firm is considered as a(n) _____.
- A. oligopolist
 - B. non-discriminating monopsonist
 - C. perfectly discriminating monopsonist
 - D. fully discriminating monopolist
21. Workers in this kind of market are inherently paid higher than workers in other form of market structures as these workers are _____.
- A. working for a company that is the only supplier of the goods
 - B. enslaved by capitalistic driven employers
 - C. prioritising the long-term plan of delayed gratification
 - D. entitled to the risk associated with working at this company

22. Monopsonist is unique in such a way that _____.
- A. it has a constant cost structure in terms of paying wage to its workers
 - B. it has an upward sloping cost structure in terms of waging its workers
 - C. its waging structure is flexible due to its large profitability margin to adjust the wage payment to its workers
 - D. it has two scenarios that both lead to a maximised efficiency in the labour market analysis
23. Which of the following is **CORRECT** that pertains to hedonic wage function?
- A. It is an implicit function that takes the utility for workers and profitability for firms that measure using employment level and wage rate
 - B. It is a function that measures the relationship between wage and risk of injury such that the risk is only affecting the wage level of the workers
 - C. It is a function that measures the willingness to work in a dangerous working environment for firms and the willingness to wage accordingly for workers
 - D. It is a function that measures the feasibility between workers and firms in a risky working environment with wage rate and injury risk as the variables
24. An individual is considered as risky-job lover if _____.
- A. his reservation price and marginal utility for risk are positive in values
 - B. his marginal utility for wage is positive but his marginal utility from risk is negative
 - C. his reservation price and marginal utility from both wage and risk are all strictly negative
 - D. his reservation price and marginal utility from both wage and risk are all strictly positive

25. If a worker who is already working in a dangerous environment, and his wage rate gets higher as more workers are newly recruited into the company, we can theoretically infer that _____.
- A. the wage he receives is undercompensated as he was paid lower prior in comparison to the new workers hired
 - B. the wage he receives is overcompensated by the new entrants
 - C. his reservation price is negatively distorted by the manipulation of the company
 - D. his utility increases from the positive change in risk as more workers are employed in the company
26. What is the significance of reservation pricing due to risky working environment?
- A. It shows the wage differentials of an individual based on risk on injury
 - B. It shows the wage differentials based the profitability of the firm
 - C. It shows the point of indifference in wage rate as the risk of unemployment is high
 - D. it shows the point of indifference in wage rate for the unawareness of risk as assessed by the government
27. In what way that a firm is going to be better off of a federal regulation rollout?
- A. When there is a minimum wage policy imposed, if and only if the firm is a regulated monopoly
 - B. When the number of workers increase and the firm has the chance to transfer the tax burden to workers if and only if the labour supply curve is upward sloping
 - C. When the risk of injury at the working premises is minimised as long as there is no requirement for social security (SOCSO) protection for workplace accident is imposed as well
 - D. When the regulated benefit is carried out and the feedback from the beneficiaries are equal to the cost of delivering the benefit

28. Under the rule of marginal rate of return (MRR), an individual will only further for tertiary education if _____.
- A. the perceived cost of college enrolment is equal to MRR
 - B. there exists a large gap between year of schooling and the salary level in MRR
 - C. the perceived market interest rate is equal to the MRR
 - D. the discount rate is equal to the market interest rate
29. What is the equivalent of terminal cash flow (TCF) in analysing the net present value of going to school?
- A. The number of years of a person in service multiplies by the interest rate
 - B. The last salary (plus any gratuities) that a person receives upon retirement
 - C. The latest market interest rate to the power of years of working
 - D. The total salary that a person receives per year of working
30. If a government imposes minimum risk on injury at a workplace as a means of eliminating unawareness risk, _____.
- A. the perceived utility of a worker will be higher in accordance with the reduced risk in injury
 - B. the perceived utility of a worker will be lower in accordance with the fall in the wage rate
 - C. the profitability of a firm is going to be higher as premium payment of insurance falls due to reduced risk of injury
 - D. the profitability of a firm is going to be lower as the wage of the workers must be increased

Section B (Total: 70 Marks)

INSTRUCTION: This section comprises **THREE** questions, you are required to answer **ONLY TWO (2)** questions in the answer booklet provided. Each question is worth 35 marks in total.

Question 1

- (a) It is given that under the compensating wage differentials framework, the utility of a worker in a risky-job market is a function of $U = f(w, \rho)$.
- (i) Derive the function above with respect to both w and ρ under this framework.
(2 marks)
- (ii) Based on your answer in (i), examine the derivatives of both w and ρ under the same framework. Your answer should extend to the any conditions on any of these variables (if any)
(4 marks)
- (iii) Illustrate an appropriate diagram based on your answers in (i) and (ii). Analyse the diagram that you have drawn here.
(7 marks)
- (b) A government may impose a form of taxation that could potentially contribute to a large growth in GDP. Examine the effects of **income tax** to workers on employment and wage levels using appropriate illustration of diagram(s).
(10 marks)
- (c) A benevolent ruler would always want the best for his people, to the extent that all workers should be equally waged across his ruling territory. Assume that several assumptions hold, analyse how this ruler can achieve a situation where all workers are paid equally across regions of his nation.
(12 marks)

Question 2

(a) It is given that an individual with a budget constraint of $C = (wT + V) - wL$, such that $V = 0$ and this person loves working more in comparison to having leisure.

(i) Illustrate a budget line-indifference curve that represents this person's budget and preferences with appropriate label. Explain such an illustration accordingly.

(8 marks)

(ii) Based on your answer in (i), examine the possibility whether this person is able to earn his maximum income if all he wants is working and has no rest at all. Provide relevant diagram(s) to support your answer.

(6 marks)

(iii) Suppose that the company that he is currently working for has decided to increase his wage as a means to motivate him to clock in for more working hours. As it turns out, this person does not clock in more hours as opposed to what he used to, prior to the wage increase.

Discuss what effect does this wage increase happen to him, with the aid of an appropriate illustration of a diagram.

(9 marks)

(b) It is given that the profit for a hazardous firm is given by $\pi = f(w, \rho)$.

(i) Derive the function above with respect to w and ρ for firms.

(3 marks)

(ii) Based on your answer in (i), discuss the properties of this function as well as through a proper illustration of a diagram.

(9 marks)

Question 3

- (a) Figure 3 below shows a labour market equilibrium at point N^*, w^* . This equilibrium is achieved from a series of processes that begins from the intersection of N_0^d and N_0^s . Analyse the process that allows for this equilibrium to be achieved.

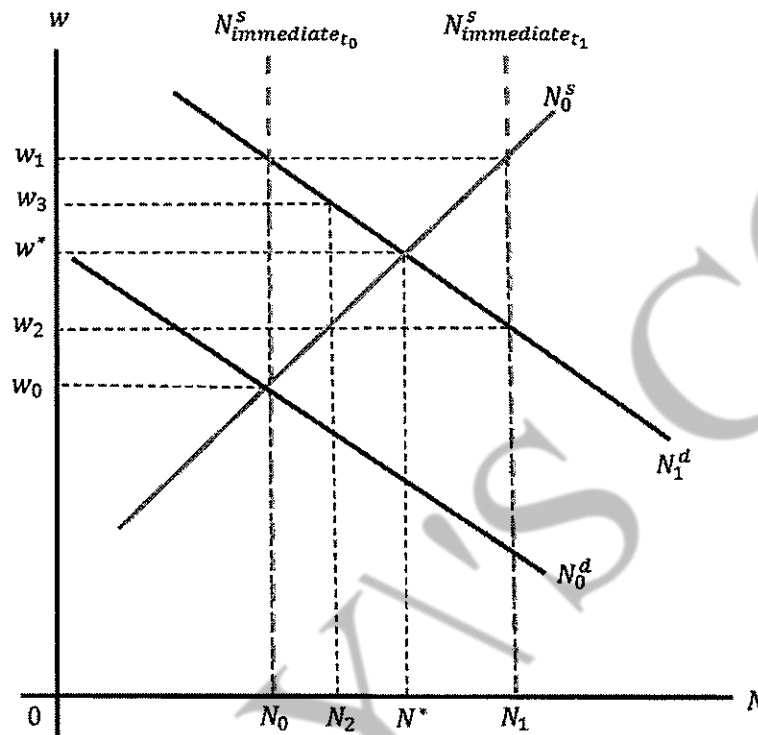


Figure 3

(25 marks)

- (b) Why are there firms exposing their workers with dangerous working environment when the choice of providing safe working conditions is always available? Examine your answer. You are not required to illustrate any diagram for this question.

(10 marks)

END OF EXAMINATION PAPER