



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMMERCE, HUMAN SCIENCE AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS	
QUALIFICATION CODE: 07BECO	LEVEL: 7
COURSE CODE: LAE612S	COURSE NAME: LABOUR ECONOMICS
SESSION: NOVEMBER 2025	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
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<p style="text-align: center;">INSTRUCTIONS</p> <ol style="list-style-type: none">1. Answer ALL the questions2. Write clearly and neatly.3. Number the answers clearly.
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PERMISSIBLE MATERIALS

1. Scientific calculator
2. Pen and Pencil
3. Ruler

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

QUESTION ONE
MULTIPLE CHOICE QUESTIONS

[25 MARKS]

1. The demand for labour is considered a derived demand because: [2 marks]
 - a) Workers demand higher wages
 - b) Labour demand depends on government policy
 - c) Labour is demanded for the goods and services it produces
 - d) Firms want to reduce costs

2. In the labour market, two inputs are called gross substitutes when: [2 marks]
 - a) An increase in the price of one input raises the demand for the other
 - b) An increase in the price of one input lowers the demand for the other
 - c) They are always used together in fixed proportions
 - d) Labour demand curve shifts left

3. A backward-bending labour supply curve occurs because: [2 marks]
 - a) Substitution effect always dominates
 - b) Income effect eventually dominates at high wage rates
 - c) Wages are fixed
 - d) Labor demand is perfectly inelastic

4. Capital and labour are gross complements if: [2 marks]
 - a) More machines reduce the demand for labour
 - b) More machines increase the demand for labour
 - c) A wage increase increases capital demand
 - d) They can easily replace one another

5. The elasticity of substitution between labour and capital measures: [2 marks]
 - a) How much output changes when labour changes
 - b) The percentage change in labour employed when wages change
 - c) The ease with which labour can be substituted for capital
 - d) The slope of the labour demand curve

6. If the elasticity of substitution between labour and capital is high, it means: [2 marks]
 - a) Labour and capital cannot replace each other
 - b) Labour can easily replace capital, and vice versa

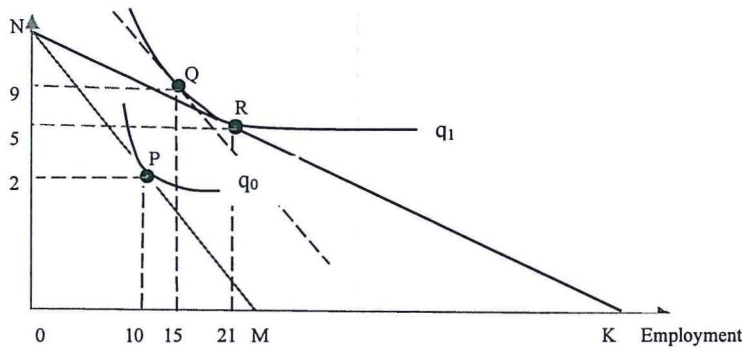
- c) Output is fixed
 - d) Wages will not affect employment
7. Which of the following scenarios shows both substitution and scale effects? [2 marks]
- a) Wages rise, firm uses more machines and reduces output
 - b) Wages fall, firm replaces labour with capital only
 - c) Output increases without changing input mix
 - d) Labour productivity falls but output rises
8. Which of the following best describes the difference between substitution and scale effects? [2 marks]
- a) Substitution is about changes in input mix, while scale is about changes in overall production level
 - b) Scale is short run, substitution is long run
 - c) Substitution is caused by technology, scale by wages
 - d) Scale effect always increases employment
9. In the labour market, a firm's hiring decision is primarily based on: [2 marks]
- a) Average product of labour
 - b) Value for marginal product of labour
 - c) Total revenue
 - d) Wage elasticity of demand
10. When the wage rate increases, the substitution effect dominates, a worker is likely to: [2 marks]
- a) Work fewer hours because leisure is a normal good
 - b) Work more hours because leisure becomes relatively more expensive
 - c) Stop working entirely
 - d) Be unaffected in their labour supply

QUESTION TWO

[20 MARKS]

The figure below represents a particular firm in the labour market. Before the increase in the wage rate, the firm use P as a combination of inputs (employment and capital) to produce q_0 level of output (q_0). After the increase in wage rate, the firm used R as a combination of inputs to produce q_1 level of output.

Capital



Use the information in the figure above to fill the table below

Scale Effect	
Labour [E]	What is the change in labour? [2 marks]
Capital [K]	What is the change in capital? [2 marks]
Output [q]	What is the change in output? [2 marks]
Substitution Effect	
Labour [E]	What is the change in labour? [2 marks]
Capital [K]	What is the change in capital? [2 marks]
Output [q]	What is the change in output? [2 marks]
Total Effect	
Labour [E]	What is the total change in labour? [2 marks]
Capital [K]	What is the total change in capital? [2 marks]
Output [q]	What is the total change in output? [2 marks]
Relationship between labour and capital	Gross complements or substitutes? [2 marks]

QUESTION THREE

[25 MARKS]

In a mining industry, labour supply is $E_s = -10 + 3w$. In the fishing industry, labour supply

is $E_s = -5 + 2w$ and labour demand in both industry is $E_d = 15 - 2w$, where E is the level of employment and w is the hourly wage.

- Draw the demand and supply curves for labour using the information above for each industry. [10 marks]
- Calculate the market wage rate in each industry where the unemployment rate is equal to zero. [5 marks]
- Calculate the market wage rate in mining industry where the unemployment value is 5. [5 marks]
- Calculate the market wage rate in fishing industry where the unemployment value is 4. [5 marks]

QUESTION FOUR

[35 MARKS]

- The table below reports the unemployment rate, labor force participation rate, and (working-age) population for India in January 2015, and 2024. Using these data, answer question below.

	<u>2015</u>	<u>2024</u>
Unemployment Rate	28.0%	45.0%
Labor Force Participation Rate	56.2%	52.7%
Working-age Population	235m	410m

How many people were officially unemployed at the start of each year? [10 marks]

- M & J enterprises is operating in the short-run with capital fixed at 5 level of inputs and labour is a variable input.

Labour hours	Total Product	Per unit price
1	40	5
2	134	5
3	246	5
4	340	5
5	400	5
6	440	5
7	470	5
8	492	5

- Use the information in the table above to draw the demand curve for labour in the short run. [15 marks]
- Advice M & J enterprises on how many employees must be recruited for them to maximize their profits if market wage is N\$200.00. [10 marks]

All the best