



# NAMIBIA UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE, HUMAN SCIENCES & EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

BACHELOR OF ECONOMICS HONOURS

(08BECH)

INDUSTRIAL ECONOMICS (IEC820S)

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**DURATION:** 3 Hours  
**MARKS:** 100

## SECOND OPPORTUNITY EXAMINATION QUESTION PAPER

<b>EXAMINER</b>	Prof. T. KAULIHOWA (Namibia University of Science and Technology)
<b>MODERATOR</b>	Dr. E. TINGUM (University of Namibia)

### INSTRUCTIONS

1. This paper is made up of two (2) sections (A &B)
2. Answer ALL questions
3. Show all your workings & and round off only the final answers to 2 decimal places
4. Calculators are allowed.

This paper consists of 5 pages including this cover page

1. Which of the following is a key emphasis of Industrial economics?
  - a. Monopoly Firms
  - b. Imperfectly competitive markets
  - c. Perfectly competitive market
  - d. Free entry and exit conditions.
  
2. Which of the following is NOT true about Schumpeter's theory of creative destruction?
  - a. Competition is driven by innovation.
  - b. Abnormal profit and market power are bad.
  - c. Innovators destroy old products and processes.
  - d. Innovators earn profit at a decreasing rate.
  
3. Which of the following is not an attribute of firm conduct?
  - a. Price controls
  - b. Collusion
  - c. Predatory pricing
  - d. Vertical Integration
  
4. Which of the following is true about the New Industrial Economics Theory
  - a. Causality runs from Structure to Conduct to Performance
  - b. Conduct determines both Structure and Performance
  - c. Causality is bidirectional.
  - d. Causality runs from Performance to Conduct to Structure
  
5. Which of the following increases concentration and market power the most?
  - a. No entry barriers
  - b. Differentiated products.
  - c. Prohibitive entry barriers
  - d. Brand differentiation
  
6. The less elastic the demand for monopolist's producer, the degree of monopoly power will be...
  - a. More
  - b. Less
  - c. Same
  - d. Zero

7. In Porter's "five forces model", what is the key type of competitive activity that exists between firms/organizations?
- The potential for entry into the industry
  - The threat to substitute
  - The power of customers
  - The level of rivalry
8. Which of the following is NOT a measure of market concentration?
- Concentration ratio
  - Lerner Index
  - Hirschman -Herfindahl Index
  - Entropy Index
9. Which of the following is a form of nonprice competition?
- Advertising
  - Quality of service
  - Product quality
  - All of the above
10. One of the reasons that most economists do not support government industrial and trade policies is that the outcome of these policies cannot;
- Have a positive effect on a country's industries.
  - Be accurately predicted.
  - Help countries to overcome comparative disadvantage.
  - Prevent countries from losing a comparative advantage

1. Which model (Cournot, Bertrand) would you think provides a better approximation to each of the following industries: Oil refining and insurance? Motivate your answer. [4]
  
2. Assume that Namibia's telecommunication Industry is represented by the following cost function.  $C(q_1, q_2) = 40 + 10q_1 + 15q_2 - (3q_1 q_2 / 2)$ . Where  $q_1$  denotes MTC output and  $q_2$  represents Telecom Namibia output. Further to this, assume that Ray's average costs (RAC) adopt  $\lambda_1 = 0.8$ ,  $\lambda_2 = 0.2$  production ratio. Use Ray's average cost of multi-product firms to determine if the telecommunication industry exhibits a global economy or diseconomies of scale, where . Show all your steps. [8]
  
3. Assume an oligopolistic industry with two identical firms (MTC-Namibia & Paratus) with inverse demand function  $P = 62 - 2Q$  and total cost functions , . Where  $q_1$  &  $C_1$  are the quantity and cost for MTC-Namibia and  $q_2$  &  $C_2$  represent quantity & cost for Paratus respectively. Answer the following questions.
  - a. Use a Cournot model to determine the equilibrium values of profit and quantities for each firm. [10]
  - b. Assume MTC has a first-mover advantage to set prices and Paratus follows. What are the equilibrium values of profit and quantities for each firm in this case? [8]
  - c. Use the Lerner index to measure the level of market power in each model. [5]
  - d. Use answers in a), b), c) and d) to discuss the economic welfare implications of this duopoly market. [5]
  
4. Suppose a local roofing company has market power and faces the following inverse demand curve. and a marginal cost curve . Where  $Q$  is the quantity of roofing jobs and  $P$  is the price in N\$. With the use of the diagram, show the dead weight loss from market power at the firm's profit-maximising level of output. [10]

5. The Herfindahl–Hirschman Index (HHI) is a measure of concentration within an industry and is often used by regulators to evaluate the effects of a merger. Where, . Consider an industry that has four firms. Their respective market shares are tabulated below. Calculate the HHI if company A merges with company B and discuss the likely action from the market regulator if companies A and B are combined.

[10]

Company	A	B	C	D
Market Share	30%	30%	20%	20%

6. Consider the following static game in which Vodacom Group Limited (a South African mobile communications company) and MTC (a Namibia telecommunication company) are contemplating entering the Angolan Market. The game is played once only and the possible payoffs are shown in the below table, with the payoff for MTC being given first. Answer the below questions. N.B. MTC payoffs are given first.

		Vodacom options	
		<b>Enter</b>	<b>Do not enter</b>
MTC options	<b>Enter</b>	-40, -30	5, 50
	<b>Do not enter</b>	40, 0	2, 2

- a) What is the dominant strategy for each player? [4]
- b) What is the Nash equilibrium/equilibria for this game ? [4]

7. Briefly discuss any two motives for mergers and acquisitions, and provide examples of horizontal, vertical, and conglomerate mergers. [10]

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