



SCHOOL OF ECONOMICS
FINAL ASSESSMENT JUNE, 2019
APK CAMPUS

Course: Micro Economic Issues in Development

Course Code: MID9X02

NB: Students of Development Economics, your exam is in PART I from pages 1. Students of Competition and economic regulation, refer to PART II of this paper from Pages 2-5.

[PART I: DEVELOPMENT ECONOMICS STUDENTS]

Marks: 100

Time : 2 hours

Assessor(s): Prof Nicholas Ngepah

Prof Talita Greyling

Moderator: Prof F Botha

Instructions

- a) Part I of this paper is divided into two sections, a take home Section A, and Section B to be completed at the exam venue.
- b) This script contains part B of the exam only.
- c) This Part B is to be answered based on your answers to part A
- d) Answer **ALL questions**
- e) Both parts A and B are to be typewritten and submitted by email to nngepah@uj.ac.za
- f) The exam is open book. Candidates can consult any documents but plagiarism will be checked and seriously penalised.

SECTION B (30marks)

Following your critical appraisal of the manifestos of three political parties, you are required to do an executive summary of the key policy issues relating to poverty and their various channels of transmission. Based your answers on your knowledge of policies for poverty reduction in Micro-economic Issues in Development. Your summary should not exceed 2000 words.

End of Part I

[PART II: COMPETITION AND ECONOMICS REGULATION]

Course: MASTER OF COMMERCE IN COMPETITION AND ECONOMIC REGULATION (M3CR8Q)

Assessor: Ms Reena das Nair

Moderator: Prof Steven Koch

Date: 05 June 2019

Time: 3 hours

Marks: [as indicated per question]

Candidates must answer **three (3)** of the following questions. All questions carry equal weight and are marked out of 100. Each question should be answered in a new book, clearly labelled with the question number answered.

Take NOTE: There are two modules with the same name and the same code. This examination is **ONLY** for students registered for the Master of Commerce in Competition and Economic Regulation programme (M3CR8Q).

QUESTIONS

Question 1

Critically assess whether market definition, through the application of the Small but Significant Non-transitory Increase in Price (SSNIP) test, is an important analytical tool to examine and evaluate the competitive constraints that a firm faces? Explain your answer with reference to different market structures and product specifications.

[Total: 100 marks]

Question 2

Discuss the ways in which possible unilateral and coordinated effects in horizontal mergers can be evaluated. What types of efficiency justifications can the merging parties put forward in light of potential anti-competitive effects of a merger? Refer to cases and examples in your answer.

[Total: 100 marks]

Question 3

What role does information exchange play in facilitating collusion? Consider the following hypothetical scenario in articulating your answer:

There are 5 firms operating nationally in the supply of heavy fuel oil (HFO). HFO is a relatively homogenous product used extensively as a heating and energy source in many industrial processes. Because HFO is derived from crude oil, its price is subject to fluctuations due to crude oil price fluctuations. The HFO producers also supply, and are competitors in other petroleum product markets, such as diesel and petrol.

All 5 firms are members of an industry association through which they share their individual, previous month's sales volumes of HFO, by magisterial district, by province and by end customer grouping. Therefore, each firm has their competitors' sales information within a month of the sales. This information, at the individual firm level, is not available to the public. What the public does have access to through the industry association website is aggregated data on all 5 firms' sales volumes by province.

Further, each firm submits their 'proposed' pricelist for HFO for the next month to the industry association based on past crude oil prices and their prediction of future crude oil prices. This is then uploaded onto the industry association website and is available to the public. There is no commitment by the firms to adhere to these prices the following month.

The competition authority recently tracked HFO pricing (final, transaction prices) of the 5 firms and found them to move in parallel. The firms argue that this is expected given that the core underlying cost for all firms is that of crude oil and because they compete vigorously with each other in the HFO market.

[Total: 100 marks]

Question 4

- a. Jane and Mpho, two lovers, want to go out for a dinner. Jane will select the shopping mall and Mark will select the restaurant (both malls contain all three restaurants). The strategies and payoffs to each player are as given by the matrix below, with the first number denoting Jane's payoff.

		Mpho		
		Primi Piatti (P)	Kauai (K)	Doppio Zero (D)
Jane	Mall of Africa (MA)	90, 10	30, 80	50, 70
	Menlyn Mall (MM)	40, 60	60, 70	30, 90

(i) Represent this game in extensive form (i.e., draw a game tree associated with this game). Let Jane move first, with Mpho observing Jane's move.

[10 marks]

(ii) Identify all pure strategy Nash Equilibria, if any.

[10 marks]

b. Suppose that an industry is made up of two firms producing homogenous goods, firm 1 and firm 2. Demand is given by $p = 1 - q$. Industry output is $q = q_1 + q_2$ (q_1 is firm 1's output and q_2 is firm 2's output). The price equation can thus be written as:

$$p = 1 - q_1 - q_2$$

Suppose the firms choose their outputs simultaneously.

(i) Show that the Cournot-Nash equilibrium is given by $q_1^* = q_2^* = \frac{1}{3}$. Show all your workings.

[24 marks]

(ii) Compute the profit of firm 1, π_1^* . (Observe that $\pi_1^* = \pi_2^*$ by symmetry).

[16 marks]

(iii) Compute the equilibrium market price and explain how the price varies with the marginal cost (*Hint*: let $q_1^* = q_2^* = (1-c)/3$, where c = marginal cost).

[12 marks]

c. Suppose the two firms in part b above merged to become a monopoly. Compute the monopoly profit. How does merging affect industry profitability? Explain your answer.

[28 marks]

[Total: 100 marks]

Question 5

Compare and contrast the rate of return and price-cap methods of regulation in terms of the incentives to invest, achieve efficiencies and ensure lower prices to consumers. Make reference to examples from the regulation of telecommunications and/or the energy sector in your answer.

[Total: 100 marks]

Question 6

- a. Assess the costs and benefits of an import tariff by South Africa on chickens. Assuming that South Africa is a small country (and the tariff does not affect world prices), illustrate your answer on a fully labelled figure/graph. Explain the adjustment process following the imposition of the tariff.

[60 marks]

- b. Dani Rodrik (2004) lists several best practice design principles for industrial policy. Among them are:

- Incentives should be provided only to “new” activities
- There should be clear criteria for success and failure
- There must be a built-in sunset clause

Do you agree with Rodrik’s principles above? Why or why not? Critically assess these principles, with reference to South Africa’s industrial policy. Give specific examples.

[40 marks]

[Total: 100 marks]

End of Part II

End of the exam paper