WARNING

This material has been reproduced and communicated to you by or on behalf of *Charles Darwin University* in accordance with section 113P of the *Copyright Act 1968* (Act).
The material in this communication may be subject to copyright under the Act.
Any further reproduction or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice

Charles Darwin University

Final Examination

Family Name	
Given Name/s	
Student Number	
Teaching Period	Semester 1, 2018

ECO205 – Management Economics	DURATION
	Reading Time: 10 minutes
	Writing Time: 180 minutes

INSTRUCTIONS TO CANDIDATES

The examination has 2 (Two) sections.

Section A: 10 marks
Suggested Time: 100 mins
Essay Question: Answer ALL (One) question.

Section B: 20 marks
Suggested Time: 70 mins
Problem Based Questions: Answer ALL (Two) questions

Total marks for this examination: 30 marks

EXAM CONDITIONS

<u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only.

This is a RESTRICTED OPEN BOOK examination

Any non-programmable calculator is permitted

No handwritten notes are permitted

Any hard copy, unannotated English dictionary is permitted

ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED
No additional printed material is permitted	1 x 16 Page Book

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

Section A

Essay Question

Total No of Marks for this Section: 10

Suggested time allocation for Section A: 100 mins

Letter to the editor from the NT News Saturday January 6, 2018

Relax air rules

It is good to see renewed public discussion about the possibility of relaxation of cabotage rules for carriage of passengers between Darwin (and cairns) and southern capitals.

Darwin Lord Mayor Kon Vatskalis recently advocated this, as did independent MLA Terry Mills.

Cabotage is the right for foreign airlines to carry passengers or freight between domestic destinations.

I understand that experts in the Prime Minister's office believe that a carefully negotiated relaxation of cabotage rules could potentially provide a way to get more flights into Darwin and put downward pressure on ticket prices.

However, last time the issue was raised, in 2015, both Qantas and Virgin strongly opposed it, claiming it could imperil the viability of their existing services to Darwin. The Federal Government isn't going to take the initiative on this question and enter discussions with local and foreign airlines, or trade unions whose members may be affected.

It is up to the NT Government to start those talks.

No country allows open slather for foreign airlines to ply domestic routes, and Article 7 of the Chicago Convention prohibits an exclusive cabotage arrangement between one country and another.

However, increasingly some countries are entering into reciprocal arrangements with one or more other countries, especially in order to enhance air links to and from some of their smaller population centers.

Arguably that doesn't breach Article 7 as long as such arrangements are potentially also open to other countries.

Moreover, Darwin is arguably the perfect potential case. We have a small population, a major tourist industry being strangled by lack of affordable air access, and most international flights to and from southern Australia currently fly straight over Darwin without landing.

Let's take a hypothetical example of how a reciprocal arrangement might work.

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

It might be possible for Australia (with NTG stewardship) to negotiate an agreement whereby we allow (say) China Airlines to carry domestic passengers on the Darwin-Sydney and Darwin-Melbourne routes in exchange for Qantas and Virgin carrying domestic Chinese passengers on the Hong Kong – Beijing and Shanghai- Beijing routes.

Australian airlines' access to one or more lucrative Chinese domestic routes would compensate for any loss of some passengers (or lower fares) on Darwin services.

Both Australian and Chinese airlines would use their reciprocal cabotage rights to top up loadings on the domestic legs of their existing international flights that aren't quite full.

That is likely to enhance their viability and put down-ward pressure on prices as they discount fares to fill the plane.

It's an idea worth exploring.

Ken Parish, Senior Lecturer in Law, Charles Darwin University

Task:

Using the concepts of management economics discussed this semester; examine the effects of introduction of cabotage in the Darwin market

(10 marks)

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

Section B

Problem Based Questions

Total No of Marks for this Section: 20

Marks for each question are indicated.

Suggested time allocation for Section B: 70 mins

Question 1:

Restaurants traditionally used bottom-end wines to sell by the glass (BTG) at reasonably low prices per glass. In recent years, there has been a growing trend within the restaurant industry to extend BTG programs to higher-end wines. In doing so, they have greatly expanded the sales of higher-end wines. The typical markup on a bottle of wine is 100 percent or more, meaning that a bottle of wine that sells at retail $25 in a wine shop can be priced at $100 in a restaurant. To simplify the discussion, suppose that wine is offered at $10 per glass. Mangers adjust the size of the serving depending on the price per bottle of the wine being poured. For example, a 4-ounce pour can be offered for wines ranging from $40 to $50 range and a 2-ounce pour can be offered for wines in the $80 to $100 range. Normally a bottle has 25.4 ounces; the BTG programs are quite successful from the supplier's point of view. This is also a successful strategy for the supplier because, with proper storage, a partial bottle can be poured the following evening with no noticeable change in taste.

Based on this background, please answer the following:

a. Using Demand theory concepts provide justification why demanders would be interested in the BTG program.

(5marks)

b. Your friend the restaurant manager reported a sale for last week of 200 glasses at $10 per glass. She noticed that this week when she raised the price to $11 per glass the quantity sold was 20 glasses less than before the price change. Using this information as the basis for a full demand curve for the BTG program:

i. Determine the BTG demand for the restaurant.

(2marks)

ii. Predict how many glasses will be sold at $15 per glass.

(1mark)

iii. What would be the difference to the estimated number of glasses sold if the response to a $1 price change is 10 glasses per week or 25 glasses per week?

(2marks)

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

Question 2:

(a) The total and marginal cost of producing Product A are:

$TC = \$1,000 + 2Q^2$

$MC = 4Q$

The $1,000 is a fixed cost in the short run, but can be avoided in the long run by shutting down (going out of business). There is only one possible plant size for this operation; thus SRMC = LRMC = 4Q. Derive and graph the firm's short-run and long run supply curves.

(5marks)

(b) Suppose your firm faces a demand curve of P = 90 - 0.30Q and the marginal cost of production is $10 per unit. Find the profit maximizing output and price. Display this choice graphically (showing the demand, marginal revenue, and marginal cost curves). Is this outcome elastic, inelastic, or unitary elastic part of the demand curve? Explain your reasons. What are the profits?

(5marks)

THIS EXAMINATION PAPER AND SUPPLIED MATERIALS ARE NOT PERMITTED TO BE REMOVED FROM ANY EXAMINATION VENUE IN ANY CIRCUMSTANCE. THIS EXAMINATION IS PRINTED DOUBLE-SIDED.