MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2013/2014

FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF MASTER OF ARTS IN ECONOMICS

(CITY CAMPUS - WEEKEND)

AEC 801: ADVANCED MICROECONOMICS

Date: 24th November, 2013 *Time: 2.00 - 5.00 p.m.*

1. (a). Given Slutsky equation as $\frac{\partial x_i}{\partial p_i} = \frac{\partial x_{is}}{\partial p_i} - \frac{\partial x_{im}}{\partial m} x_i$, show that the equation decomposes the demand change induced by price change (∂p_i) into substitution and income effects. (8marks)

(b). Using an illustration, show that the "Law" of Downward-Sloping Demand curve always applies to normal goods. (7marks)

2. Game theory is useful in explaining a wide variety of phenomena, including the tendency for members of a cartel to cheat (that is, secretly cut price). Suppose that two firms- Atlas and Baker- form a cartel. Each firm has two possible strategies: to stick by the cartel agreement or cheat. There are four possible outcomes, depending on which strategy each firm pursues:

	Possible strategies for Baker	
Possible strategiesfor Atlas	**Stick by agreement**	**Cheat**
Stick by agreement	Atlas and Baker share the monopoly profit	Baker does better than under the agreement: Atlas does much worse
Cheat	Atlas does better than under the agreement; Baker does much worse	Both firms do somewhat worse than under the agreement

a) If Baker sticks by the agreement, which strategy is better for atlas? (2marks)

b) If Baker cheats, which strategy is better for Atlas? Explain your answer. (2marks)

c) If Atlas sticks by the agreement, which strategy is better for Baker? Explain your answer. (3marks)

d) If Atlas cheats, which strategy is better for Baker? Explain your answer. (3marks)

e) In the given situation "prisoner's dilemma", do both parties fare worse than if they cooperated? (3marks)

f) What sort of advice can a cartel adopt to encourage less cheating? (2marks)