



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**  
**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE IN**  
**AGRIBUSINESS MANAGEMENT**  
**4<sup>TH</sup> YEAR 1<sup>ST</sup> SEMESTER 2019/2020 ACADEMIC YEAR**  
**REGULAR**

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**COURSE CODE: BEN 3415**

**COURSE TITLE: Intermediate Microeconomics**

**EXAM VENUE:** **STREAM: (BSc. Agribusiness Management)**

**DATE:** **EXAM SESSION:**

**TIME: 2HOURS**

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**Instructions**

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO questions in Section B**
  - 2. Candidates are advised not to write on the question paper**
  - 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**
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**SECTION A** **[30 MARKS]**

**Answer ALL questions from this Section.**

1. The law of diminishing marginal utility is also based on the assumption that the consumer is rational. An economic agent is said to be rational when the agent exhibits behaviour which is consistent with a set of rules governing preferences.
  - a) In the context of consumer behavior, explain some of the axioms or assumptions governing these preferences. **[8marks]**
  - b) State the law of diminishing marginal utility. **[2marks]**
  
2. An isoquant shows all the different combination of inputs with which a firm can produce a specific quantity of output.
  - a) Briefly explain the properties of isoquant. **[6marks]**
  - b) What do you understand by the term Least Cost Factor Combination? **[2marks]**
  - c) What is a factor of production? **[2marks]**
  
3. Game theory is concerned with how individuals make decisions when they are aware that their actions affect each other.
  - a) Explain how it can be applied to economic analysis and decision making. **[4marks]**
  - b) What are the implications of second theorem welfare economics? **[4marks]**
  - c) Explain why the indifference curves slope from left to right and are convex to the origin. **[2marks]**

**SECTION B [40 MARKS]**

**Answer any TWO QUESTIONS in this Section.**

4. Consider two companies, ABC and XYZ, competing in a market for a product in which price is a key consideration in the purchasing decisions of a consumer. They have certain expected gains from charging a high or low price relative to the price charged by the other. If both decide to charge low price, each will get a return of 300 each while if both go for high, each will receive 700. However, if either charges high or low, each will receive either 1400 or 150 respectively.

a) Fill in the pay-off matrix below and advise the company managers accordingly.

**[10marks]**

		<b>Company XYZ</b>	
		Low price	High price
<b>Company ABC</b>	Low price		
	High price		

b) Explain how game theory can help a firm make strategic decisions to gain a competitive advantage over its rivals or how it can minimize the potential harm from a strategic move by a rival. **[6marks]**

c) Explain the importance of mobility of factors of production in an economy. **[4marks]**

5. A change in relative prices leads substitution of one commodity for another while change in income leads to change in quantity of goods demanded.

a) Using the indifference curve analysis, illustrate the income and substitution effect of a normal good. **[8marks]**

b) What are the bases for wage claims by the trade unions? **[8marks]**

c) Differentiate between:

i. An inferior good and a giffen good. **[2marks]**

ii. Isoquant and Isocost. **[2marks]**

6. Given a demand function of  $P=5-0.25Q$  where P is the price and Q is the quantity demanded.
- a) Derive the total revenue (TR), average revenue (AV) and marginal revenue (MR) functions. **[6marks]**
  - b) Calculate the level of output that maximizes revenue. **[4marks]**
  - c) What are necessary and sufficient conditions for profit maximization? **[4marks]**
  - d) Explain the factors that limit the success of trade unions in developing countries. **[6marks]**