



# MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR SECOND SEMESTER EXAMINATION FOR  
BACHELOR OF SCIENCE IN AGRI-BUSINESS MANAGEMENT AND TRADE

AGB 313: MANAGERIAL ECONOMICS

DATE: 25/4/2019

TIME: 11:00 – 1:00 PM

## INSTRUCTIONS

- i) Answer question ONE and any other TWO questions. Question one carries 30 marks and the other questions carry 20 marks each.
- ii) Do not write on the question paper

## QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Explain the scope of managerial economics. (6 marks)
- b) Suppose that you have the following demand and supply curve for sneakers:  
 $Q_d = 400 - 3P$   
 $Q_s = 200 + 2P$ 
  - i) Solve for the equilibrium price and quantity; (4 marks)
  - ii) Calculate consumer expenditures on sneakers; (2 marks)
  - iii) Draw a graph to indicating equilibrium quantity and price you have calculated; (2 marks)
  - iv) Calculate the elasticity of demand at the equilibrium found in (i); (3 marks)
  - v) Would a 5% increase in price cause consumer expenditures to rise or fall? Explain. (3 marks)

- c) Suppose that you have the opportunity to invest \$50,000 in a new business in Machakos town. Explain how you would arrive at a possible venture citing factors to be considered in your decision. (10 marks)

**QUESTION TWO (20 MARKS)**

- a) Critically examine Porter's Five forces of competitive advantage (10 marks)
- b) In the analysis of the structure of an industry, several factors have to be considered. State and explain any four of these factors. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) Suppose that you are a pizza shop. Your profits depend on your sales of pizza and beer. Specifically, your profits as a function of Pizza sales (P) and beer sales (B) is given by:

$$\text{Maximize profit}(\pi) = 80P - 2P^2 - PB - 3B^2 + 100B$$

Subject to:  $P+B=12$

Using substitution method, or any method of your choice, solve the optimization problem for the shop (i.e. determine the maximized  $\pi$ ). (10 marks)

- b) As a manager of XYZ enterprise Limited, draft a decision-making mode while giving examples. (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Contrast monopolist and perfectly competitive market structures (8 marks)
- b) Write short-notes on the following techniques of investment appraisal:
- i) Payback period (4 marks)
  - ii) Net Present Value (NPV) (4 marks)
  - iii) Internal Rate of Return (4 marks)

### QUESTION FIVE (20 MARKS)

- a) Discuss the importance of evaluating a business idea before investment? (10 marks)
- b) You are given the following information regarding the purchase of capital equipment Q.

|                                         |         |
|-----------------------------------------|---------|
| Initial cost                            | \$6,000 |
| Life of the project                     | 6 years |
| Annual cash inflow                      | \$2,200 |
| Required rate of return (discount rate) | 20%     |

Compute the NPV of the equipment and state whether the equipment should be purchased or not giving reasons. (10 marks)