BACHELOR OF SCIENCE IN AGRIBUSINESS

FOURTH YEAR SECOND SEMESTER EXAMINATION

(FOR 2016/2017 ACADEMIC YEAR)

COURSE CODE: AGB423

COURSE TITLE: MANAGERIAL ECONOMICS

INSTRUCTIONS TO CANDIDATES:

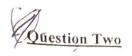
- Answer question one and any other three questions
- The duration of this paper is 3 hours

Question One

a) Consider the following Cobb-Douglas production function from manuf	acturing sector:	
$Q=10L^{0.75}K^{0.45}$		
(i) What are the marginal products of Labour and Capital	(3 Marks)	
(ii) What is the marginal rate of technical substitution of capital for labour	(3 Marks)	
(iii) Calculate the factor intensity and explain the technique of production that is the production process	s being used in (3 Marks)	
(iv) How would you characterize this manufacturing sector in terms of the returns to scale. Explain the significance of this information in decision making. (4 Marks		
b) What is elasticity of demand	(2 marks)	

(10 marks)

c) Outline and explain the stages in the decision making process



Suppose the total benefit derived from a given decision, Q, is $B(Q) = 25Q - Q^2$ and the corresponding total cost is $C(Q) = 5 - Q^2$, so that MB(Q) = 25 - 2Q and MC(Q) = -2Q.

a. What is total benefit when $Q = 2? Q = 10?$		(3 Marks)
b. What is marginal benefit when $Q = 2$?	BRI- ZEA-RA	(2 Marks)
c. What level of Q maximizes total benefit?	Box	(2 Marks)
d. What is total cost when $Q = 2$?		(2 Marks)
e. What is marginal cost when $Q = 10$		(2 Marks)
f. What level of Q minimizes total cost?		(2 Marks)
g. What level of Q maximizes net benefits?		(2 Marks)
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Question Three

The demand for good X is given by

 $Q_x^d = 1200 - 1/2Px + 1/4Py - 8Pz + 1/10N$

Research shows that the prices of related goods are given by Py=Sh5,900 and Pz=Sh 90, while the average income of individuals consuming this product is M=Sh55,000.

a. Indicate whether goods Y and Z are substitutes or complements for good X .	(4 marks)
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c. How many units of good X will be purchased when
$$Px=Sh4,910$$
? (4 marks)

Question Four

Suppose that; Mr. Moreno is a Strategic and Risk Manager in Salsa Bongo Corporation (SBC), a multinational telecommunication corporation operating in the Republic of Kenya. He is faced with managing various investment portfolios and projects in telecommunications carried out by the corporation on a daily basis.

a) Define Managerial Economics and Strategy as used in decision making (2 Marks)