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MAIN EXAMINATION

JANUARY – APRIL 2014 TRIMESTER

FACULTY OF COMMERCE

MBA- PROGRAMME

CEC 520: MANAGERIAL ECONOMICS

Date: APRIL 2014	**Duration: 3 Hours**
INSTRUCTIONS: Answer ALL Questions	

Q1. a) In the theory of the firm:

i) Explain briefly the primary long run goal of the firm. **(2 marks)**

ii) Using suitable illustration, explain briefly the stament 'The firm is a legal device" **(3 marks)**

b) Explain briefly the terms:

i) Accounting profit **(1 mark)**

ii) Economic profit **(1 mark)**

c) Explain briefly the term 'optimal decision'. **(2 marks)**

d) State the condition for:

i) Revenue maximization **(1 mark)**

ii) Cost minimization **(1 mark)**

iii) Profit maximization **(1 mark)**

e) A business firm, BADIC Limited, that specializes in the manufacture of trousers for men has the following revenue and cost functions.

TR = Kshs. 2040Q – Kshs. $127.5Q^2$
TC = Kshs. 680 + Kshs 340 Q + Kshs.$42.5Q^2$

Where

TR is total revenue
TC is total cost
Q is output sold per month

Required:

i) Calculate the profit maximizing output level **(2 marks)**
ii) Maximized profit **(1 mark)**

Q2. a) Explain briefly the:
i) The term 'basis of demand' **(2 marks)**
ii) Two basic models of individual demand. **(2 marks)**

b) Using suitable illustrations, explain briefly the effects on the budget constraint of:
i) Changing income **(1½ marks)**
ii) Changing prices **(1½ marks)**

c) Explain briefly **THREE** instances where elasticity concept finds application. **(3 marks)**

d) Consider the supply function for an automobile industry in a hypothetical economy given as follows:

$$Q = 1,000P - 250P_x - 50,000W - 7,500S - 62,000E - 500,000i$$

Where:
Q = Number of new domestic automobiles (in millions) supplied during a given period.
P = Average price (in $) of new domestic automobiles.
P_x = Average price (in $) of new imported automobiles.
W = Average hourly price of labour (in $) per hour

S = Average cost (in $) of steel per ton.
E = Average price of energy (in $).
i = Average interest rate, cost of capital in percent.

Required to analyze the quantity of automobiles supplied drug the period. **(3 marks)**

e) Explain briefly the terms:
   i) Normal goods **(1 mark)**
   ii) Inferior goods **(1 mark)**

Q3. a) Explain briefly the term 'demand estimation'. **(2 marks)**

b) State **TWO** commonly used forms of regression model specification. **(2 marks)**

c) In trend analysis method of forecasting:
   i) Explain briefly three key models **(1 mark)**
   ii) Given a linear relation between sales for Kima Shoes Limited and item of a period of 20 years, 1994-2013.

$$S_t = -Kshs120,000 + Kshs40,000t$$

Calculate a sales forecast for the year 2020. **(1 mark)**

d) Explain briefly the terms:
   i) Returns to scale production system. **(2 marks)**
   ii) Returns to a factor of production. **(2 marks)**

e) Using suitable illustration explain briefly the following terms:
   i) Short-run cost curves
   ii) Long-run cost curves
   iii) Long-run average cost curves. **(4 marks)**

Q4. a) Explain briefly the three ways of measurement of risk. **(3 marks)**

b) Consider an investor faced with the following choices:

i) Invest Kshs. 8 million if project is successful, receives Kshs. 80 million. If project fails, receives nothing; probability of success is 0.5.

ii) Do not invest, so keep the Kshs. 8 million.

Required:

i) Calculate the certainty equivalent sum

ii) Calculate the expected risky sum

iii) Calculate the certainty equivalent adjustment factor.

iv) Interpret the results in (iii) above. **(2 marks)**

c) In competitive markets:

i) Explain briefly the term 'market structure'. **(3 marks)**

ii) List the factors that shape the competitive environment. **(1 mark)**

d) The following table gives the production function of a two-input and one-output production system. The two inputs are capital and labour. The output produced is quantities of TV sets.

Units of capital	**Quantity of TV sets**									
10	52	71	87	101	113	122	127	129	130	131
9	56	74	89	102	111	120	125	127	128	129
8	59	75	91	99	108	117	122	124	125	124
7	61	77	87	96	104	112	117	120	121	122
6	62	72	82	91	99	107	111	114	116	117
5	55	66	75	84	92	99	104	107	109	110
4	47	58	68	77	85	91	97	100	102	103
3	35	49	59	68	76	83	89	91	90	89
2	15	31	48	59	68	72	73	72	70	67
1	5	12	35	48	56	55	53	50	46	40
Units of labour	1	2	3	4	5	6	7	8	9	10

Required to:

i) List the capital – labour combinations for the isoquants 91 and 89. **(2 marks)**

ii) Show graphical presentation of the isoquants in (i) above **(1 mark)**

iii) Given the short-run capital level employed by the firm on 4 units, generate a table showing:

I) Total product of labour **(1 mark)**

II) Marginal product of labour **(1 mark)**

III) Average product of labour **(1 mark)**

END