MERU UNIVERSITY COLLEGE
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University Examinations 2011/2012

THIRD YEAR, FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF
BACHELOR OF COMMERCE

HCOB 2505: PRODUCTION ECONOMICS

DATE: APRIL 2012   **TIME: 2 HOURS**

INSTRUCTIONS: *Answer questions* **one** *and any other* **two** *questions*

QUESTION ONE (30 MARKS)

a. Absolute advantage and comparative advantage are both concepts in international
   trade. Discuss.   (10 Marks)
b. What do you mean by production function? What s the difference between a short run
   and long run production function?   (10 Marks)
c. With an aid of a diagram explain the three stages of production   (10 Marks)

QUESTION TWO (20 MARKS)

a. Given the following total cost function:
   $TC = 200 + 10Q = 8Q^2 + 12Q^3$
   i.   Derive the MC function   (3 Marks)
   ii.   Derive the AC function   (3 Marks)
   iii. Calculate the MC and AC when Q is 10 units   (4 Marks)
b. Using an illustration, explain the concept of constant returns to scale.   (10 Marks)

QUESTION THREE (20 MARKS)

a. Find the degree of homogeneity and determine whether the function displays constant,
   decreasing or increasing returns to scale.
i. $Q = aK^{1/2} L^{1/4}$ (3 Marks)
ii. $Q = AK^{4/7} L^{4/7}$ (3 Marks)
iii. $Q = AK^{3/4} L^{1/4}$ (3 Marks)
c. Write the three assumptions of an isoquant   (3 Marks)
d. Highlight the factors that affect external economies of scale   (8 Marks)

QUESTION FOUR (20 MARKS)

    a. Identify eight causes of unemployment n developing countries   (8 Marks)

    b. Which are the characteristics of an entrepreneur   (12 Marks)

QUESTION FIVE (20 MARKS)

    a. You are given the following information regarding a certain firm.

Output (Q)	TFC	FVC
0	200	0
1	200	50
2	200	90
3	200	120
4	200	140
5	200	150
6	200	156
7	200	176
8	200	208
9	200	270
10	200	350

Determine total cost (TC) marginal cost (MC) average variable costs (AVC) average fixed costs (AFC) and average total costs (ATC)   (10 Marks)

    b. Write short notes on:
       i.   Isocost line   (2 Marks)
      ii.   MRTS   (2 Marks)
     iii.   Opportunity cost   (2 Marks)
     iv.   Fixed costs   (2 Marks)
      v.   Capital   (2 Marks)

iv.