1st SEM. 2019/2020

UNIVERSITY OF ESWATINI

FINAL EXAMINATION PAPER

PROGRAMME: B.Sc. Agric. Econ. & AgBMgt.

COURSE CODE: AEM 407

TITLE OF PAPER: PRODUCTION ECONOMICS

TIME ALLOWED: TWO HOURS

INSTRUCTION: ATTEMPT ALL QUESTIONS IN SECTION A AND ANY OTHER TWO IN SECTION B

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SECTION A

1. a. What would consider as the main concerns of production economics in Agriculture. (10 marks)

b. What is a production function? (10 marks)

2. Discuss the law of variable proportions (law of diminishing returns) indicating its usefulness to a maize farmer in determining his input and output levels. (20 marks)

3. A variable input, X, costing E3 a piece is to be allocated by a farmer to three tracts of land with different production functions. The output of product from this allocation has a market value of E1 per unit. The following table contains the relevant data for making the allocative decision.

	1st tract of land		2nd tract of land		3rd tract of land	
No of variable inputs used	TVP (E)	MVP (E)	TVP (E)	MVP (E)	TVP (E)	MVP (E)
6	47	11	45	10	42	9
7	59	12	56	11	49	7
8	72	13	65	9	54	5
9	84	12	73	8	57	3
10	95	11	80	7	59	2
11	104	9	85	5	60	1
12	112	8	89	4	60	0
13	119	7	92	3		
14	124	5	94	2		
15	128	4	94	0		
16	131	3				
17	133	2				

(a) If the farmer had 40 units of the variable input, what allocative principle would he use and how much of the variable input would he allocate to each tract of land in order to maximize profits? (10 marks)

(b) If he had 30 units of the variable input, how would the answer to (a) above be affected? (10 marks)

SECTION B

4. (a). List the major sources of risk and uncertainty for farmers in Eswatini. (5 marks)

(b). What methods and techniques do small-scale farmers in Eswatini use to reduce risk and uncertainty in farming? (7 marks)

(c) What measures do you think national government can take to reduce risk and uncertainty for farmers in Eswatini? (8 marks)

5. a. If average total costs are E500, total fixed costs are E4,000, and total costs are E10, 000, calculate the AVC (5 marks)

b. If total fixed costs are E30, average variable costs are E28, and average costs are E31, calculate TVC and the output level (5 marks)

c. If average total costs are E300, total fixed costs are E2000, and total costs are E6000, calculate the AVC (5 marks)

d. If total fixed costs are E20, average variable costs are E10, and average total costs are E11, calculate TVC and the output level. (5 marks)

6. Write short, explanatory notes, on the following:

i. Isoquants (4 marks)
ii. Marginal rate of technical substitution (4 marks)
iii. Iso-cost line (4 marks)
iv. Ridgeline (4 marks)
v. Expansion path (4 marks)