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**University Examinations 2014/2015**

THIRD YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR DEGREE OF BACHELOR OF COMMERCE

**BEC 3253: PRODUCTION ECONOMICS**

**DATE: OCTOBER 2015 TIME: 2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. Given the following information:

**INPUT X INPUT Y**

0 0

10 44

22 100

35 180

43 250

50 290

60 300

71 280

80 260

1. Calculate the Marginal product. (4 Marks)
2. Calculate the Average product. ( 4 Marks)
3. Clearly shown the boundaries of each stage of production (4 Marks)
4. Which is the rational stage of production and why (4 Marks)
5. Distinguish between 150-Revenue and Iso-Cost Line (6 Marks)
6. Explain the causes of economics and diseconomics of scale (8 Marks)

**QUESTION TWO (20 MARKS)**

1. Explain the ways in which inputs combine. (10 Marks)
2. Explain the least cost combination principle of inputs. (10 Marks)

**QUESTION THREE (20 MARKS)**

1. With the aid of a diagram explain the stages of the law of variable proportions. (12 Marks)
2. Explain the causes of diminishing marginal returns to a factor. (8 Marks)

**QUESTION FOUR (20 MARKS)**

1. Distinguish between the following concepts:
2. Long-run and short run production functions. (4 Marks)
3. Marginal rate of technical substitution and marginal rate of transformation

(4 Marks)

1. Indifference curve and isoquant. (4 Marks)
2. Explain the three types of returns to scale. (8 Marks)