

**THE UNIVERSITY OF ZAMBIA
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS**

**INTERMEDIATE MICROECONOMIC THEORY – TEST 1
TIME ALLOWED: 1 HOUR**

Answer all three (3) questions

1. Explain how a competitive profit maximizing firm decides how much of each factor of production to demand. What determines the amount of output an economy produces? (15 marks)
2. Consider the production function below. $Y = 2K + 15L$
 - a) What do you understand by the term returns to scale? (2 marks)
 - b) Does the production function above exhibit increasing, constant, diminishing returns? Explain? (5 marks)
3. Suppose the production function for an economy is given as $Y = K^{0.5}L^{0.5}$, where K is the amount of ^{Capital} and L the amount of labour. The economy begins with 100 units of land and 100 units of labour. Find a numerical answer to each of the following question.
 - a) How much output does the economy produce? (2 marks)
 - b) What are the wage and the rental price of land? (4 marks)
 - c) What share of output does labour receive? (3 marks)
 - d) What share of output does capital receive? (3 marks)
 - e) If a plague kills half the population, what is the new output level? (3 marks)
 - f) What is the new wage and rental price of land? (4 marks)
 - g) What share of output does labour receive now? (3 marks)