



"Investing in Africa's Future"

FACULTY OF MANAGEMENT AND ADMINISTRATION

MPM202 PUBLIC ECONOMICS EXAM 1

END OF FIRST SEMESTER EXAMINATIONS

NOVEMBER/DECEMBER 2016

LECTURER: G. MANDEWO

DURATION: 3 HRS

INSTRUCTIONS

Answer Question number 1 and any other TWO Questions.

Total possible mark is 100.

Start each question on a new page in your answer

Booklet.

SECTION A

1.(a) Imagine that you are a policymaker responsible for taxation and you can use the following general tax scheme: $T = -a + t \cdot \text{Income}$, where T is the resulting tax liability, t is the flat tax rate and a is a lump-sum personal tax credit. You can choose a and t . Explain how you can make the system relatively more Progressive or less progressive while sticking to the basic formula above? [5 MARKS]

(b) Explain the following concepts and explicitly demonstrate a clear understanding

(i) Direct and indirect taxes[5 MARKS]

(ii) vertical and horizontal equity in taxation[5 MARKS]

(iii) Tax evasion and tax avoidance[5 MARKS]

(iv) Surtax and withholding tax[5 MARKS]

(c) Explain why competitive equilibria fail to be efficient in the presence of negative externalities. [5 MARKS]

(d) Discuss the relative merits of the following two policy responses to this externality problem:

(i) Pigouvian subsidy [5 MARKS]

(ii) Pigouvian taxation [5 MARKS]

(e) Explain how the following methods measure inequality:

(i) Lorenz curve[5 MARKS]

(ii) coefficient of variation[5 MARKS]

(f) Consider an economy with two persons A & B and two goods 1 & 2 Draw this economy in an Edgeworth box, putting good 1 on the x-axis and good 2 on the y-axis.

Identify the initial endowment. Sketch in some indifference curves for each consumer. [2 MARKS]

(b) Show that the initial endowment is not Pareto efficient. [3 MARKS]

(c) Discuss the First and the Second theorem of welfare economics in the context of the above illustration[5 MARKS]