



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF
ECONOMICS
EAE 805: PUBLIC SECTOR ECONOMICS 1

DATE: Wednesday, 17th May 2017

TIME: 9.00a.m-12.p.m

INSTRUCTIONS

Answer ALL questions.

Question One

- (a) Think about the rival and excludable properties of public goods. Explain the extent to which the following are public goods
- (i) Radio Broadcasts (3marks)
 - (ii) A highway (3marks)
 - (iii) A public park (3marks)
- (b) In a given city there are three types of individuals who differ only according to their preferences for a type of public good provided by city government. Individuals of the first type get a fixed benefit of 100 from the mere provision of the public good regardless of the level of provision. Individual of the second and third type get benefits according to the following benefit equations

$$B_2 = 200 + 30G - 1.5G^2$$

$$B_3 = 150 + 90G - 4.5G^2$$

Where G is units of the public good provided

Suppose that there are 50 people of each type living in the city and the cost of providing a unit of the public good is sh.3600. Determine the socially optimal level of provision of the public good. (6marks)

Question Two

(3marks)

- (a) Explain the following Concepts
- (i) Pareto improvement
 - (ii) Production Externality
 - (iii) Adverse selection
- (b) Discuss the four major options of government interventions in the economies clearly stating examples of the instruments used in each case. (12marks)
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Question Three

Suppose that there are three-sized groups of voters in a community trying to select the amount of school spending per pupil. The options are to spend either \$1000, \$3000, or \$5000 per pupil. The lowest level would allow only a bare-bones academic curriculum, the middle level would permit more varied academic courses and some transportation services and the highest level would allow bus transportation for all students and extra curricular activities in addition to academics. The position of the three voting groups are shown below.

Group	Most preferred	Second choice	Least preferred
1	\$1000	\$3000	\$5000
2	3000	5000	1000
3	5000	1000	3000

Thus, group 1 represents those trying to minimize government spending group 2 are the middle of the roaders and group 3 represent the all-or-nothing.

Required

- Plot the positions of the three groups on a diagram with level of preference on the vertical axis and level of expenditure on the horizontal axis. Connect the plot for each group with lines. Are preferences of these groups single-peaked? Explain. (5marks)
- What level of spending will be selected by majority voting? (5marks)
- Describe any other ways for this community to select a level of school spending and avoid the problem of majority voting? (5marks)

Question four

- With reference to Kenya explain the following public expenditure growth theories
 - Wagner theory (3marks)
 - Peacock and Wiseman theory (3marks)
 - Musgrave-Rostow growth theory (3marks)
 - Crowding out theory (3marks)
- Elaborate on the relevancy of public expenditure components on the economic recovery. (3marks)