

# UNIVERSITY OF JOHANNESBURG

# SCHOOL OF ECONOMICS

# **ECONOMICS 3D:** PUBLIC SECTOR ECONOMICS

# ECO3DB3/EKN3D01

# **EXAMINATION: NOVEMBER 2019**

# LECTURER: PROF DIKGANG, MR MAHABIR & MR MUBENGA

# **MODERATOR:** DR NCUBE

# **DURATION: 3 HOURS**

# TOTAL MARKS: 100

# **Instructions:**

- 1. Number of pages: 3
- 2. The paper consists of **four** (4) questions.
- 3. Each question carries 25 marks.
- 4. Answer ALL questions
- 5. Write neatly and legibly (We strongly discourage SMS style of writing)

### **Question 1**

#### [25 Marks]

- a) Distinguish between pecuniary and technological externalities and show how they might feature in the evaluation of public projects. (5 Marks)
- b) Explain the process by which market prices can be adjusted to reflect the true opportunity cost of inputs used in a public project. (10 Marks)
- c) Illustrate with the aid of a diagram what you consider to be the optimal value of a public project. (10 Marks)

# **Question 2**

# [25 Marks]

- a) With the aid of a graph, explain the likely effects of an increase in individual income tax on the supply of labour. (12 Marks)
- b) Discuss the economic effects of personal income tax by referring to economic efficiency, equity, administrative efficiency, and flexibility. (13 Marks)

#### **Question 3**

#### [25 Marks]

- a) 'Property taxes on land are not only efficient but are also equitable.' Do you agree? Discuss. (7 Marks)
- b) Who really pays the property tax on improvements? Explain by using partial and general equilibrium analysis. (8 Marks)
- c) "Tax competition by sub-national governments always has negative effects."
  Do you agree? (10 Marks)

# **Question 4**

# [25 Marks]

- a) Illustrate the effect on general equilibrium of introducing a monopoly into the two-sector model. What are the efficiency implications? (10 Marks)
- b) Should natural monopolies be regulated. (7 Marks)
- c) Critically discuss the case for and against privatising natural monopolies.

(8 Marks)

# END OF PAPER