UNIVERSITY OF SWAZILAND FACULTY OF SOCIAL SCIENCE DEPARTMENT OF ECONOMICS

SUPPLEMENTARY/RE-SIT EXAMINATION PAPER: JULY 2018

TITLE OF PAPER: ECONOMIC AND SOCIAL ANALYSIS OF PROJECTS COURSE CODE: ECO304/ECON 309 TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS:

- 1. Answer Question 1 and any other Two (2) questions.
- 2. Question 1 is marked out of 40 marks whilst the rest of the questions are marked out of 30 marks each.

DO NOT OPEN THIS QUESTION PAPER UNTIL THE INVIGILATOR HAS GRANTED PERMISSION.

Question 1 (Note: This Question is Compulsory)

- a) Distinguish between a unilateral and reciprocal externality and give two examples of each. [10 marks]
- b) Explain how negative externalities can be remedied using the following corrective measures:
 - i. Pigouvian taxes
 - ii. Regulatory limits
 - iii. Merging

[20 marks]

Note: give an example in each case

c) What is the basis of the argument that government is "neutral" in as far as the scale of projects she undertakes is concerned. [10 marks]

Question 2

- a) Explain the concepts of risk pooling and risk spreading. [8 marks]
- b) Given the following information about two projects A and B:

| 2 H H | | Project A | | Project B | |
|------------|-------------|-------------------|-------------|-------------------|--|
| | Probability | Net Present Value | Probability | Net Present Value | |
| Economic | 0.2 | E100 | 0.2 | E1100 | |
| Recession | | | | | |
| Economic | 0.8 | E2000 | 0.8 | E1750 | |
| Prosperity | | | | | |

Assuming that both projects have an initial outlay of E1000, calculate the expected net income of the projects and state which project would be preferred. Justify your answer. [10 marks]

c) Describe THREE methods which businesses can use to analyze and assess the risk that exists in its decision-making. [12 marks]

Question 3

a) Explain the Scitovsky Paradox and Kaldor-Hicks compensation principles.

[10 marks]

b) Using the Maxi-min criterion, determine the decision to be taken under conditions of uncertainty given the following pay-off matrix:

| | | STATES OF NATURE | | | |
|---------|---|------------------|-----|-----|--|
| | | А | В | С | |
| ACTIONS | 1 | 20 | 40 | 180 | |
| | 2 | -40 | 100 | 220 | |
| | 3 | 60 | 70 | 90 | |

[10 marks]

 c) Explain how the best strategy is selected using the minimax regret criterion. Use the pay-off table in (b) to select the best strategy on the basis of this criterion.
[10 marks]

Question 4

- a) As an economist, explain the stages or circumstances and timing in which you can conduct an evaluation. [12 marks]
- b) Some people argue strongly against placing monetary value on human lives. Explain their reasons for adopting this stand. [8 marks]
- c) In most circumstances market prices do not reflect the real scarcity values of resources. Does it mean that market prices are of no relevance in the social appraisal of the project? [10 marks]