UNIVERSITY OF SWAZILAND

FACULTY OF SOCIAL SCIENCE

DEPARTMENT OF ECONOMICS

MAIN EXAMINATION

MAY 2015

TITLE OF PAPER: ECONOMIC AND SOCIAL ANALYSIS OF PROJECTS

COURSE CODE: ECON 309

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: ANSWER **ANY FOUR** QUESTIONS OUT OF THE FIVE QUESTIONS.

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Question 1

a) Using marginal social cost and marginal private cost, define a negative externality. (5 marks)

b) Why is it important to consider externalities in project evaluation? (5 marks)

c) Use graph to illustrate how a negative externality results in overproduction and a lower price in the market. (15 marks)

Question 2

a) Why is it important to accord special attention to risk and uncertainty in project evaluation? (5 marks)

b) Differentiate between risk lover, risk neutral and risk averse individuals. (5 marks)

c) Distinguish between the Wald criterion, Savage criterion and Hurwicz criterion used in decision making where the decision maker is unable to assign probabilities. (6 marks)

d) Suppose you are given the following pay-off matrix representing utility levels of the decision maker. Calculate the decision criteria specified in part (c) above. Assume that the coefficient of optimism $\alpha = 0.8$. (9 marks)

States of nature	1	2	3	4
Strategies: 1	4	4	0	2
2	2	2	2	2
3	0	8	0	0
4	2	6	0	0

Question 3

a) Define shadow pricing and use an example to show how it works and why it matters in project evaluation. (10 marks)

b) Differentiate between tangible and intangible costs in cost benefit analysis of projects. (5 marks)

c) "When intangible costs or benefits enter into investment project considerations, they raise difficult issues of valuation". Discuss. Use examples to support your discussion. (10 marks)

Question 4

a) Discuss the objectives of social cost benefit analysis. (5 marks)

b) Discuss the two approaches used in social cost benefit analysis. (20 marks)

Question 5

a) Why Is it difficult to value externalities? Use your own example to illustrate how shadow pricing of externalities is done. (10 marks)

b) Using examples, distinguish between merit and demerit goods. Why is it important to adjust for these in social cost benefit analysis. (5 marks)

c) Define the shadow wage rate. How can it be calculated in social cost benefit analysis. (5 marks)

d) Describe the Coarse Theorem. Outline its limitations. (5 marks)