

**UNIVERSITY OF SWAZILAND  
FACULTY OF SOCIAL SCIENCE  
DEPARTMENT OF ECONOMICS**

**SUPPLEMENTARY/RE-SIT EXAMINATION PAPER: JULY 2018**

**TITLE OF PAPER: PROJECT DEVELOPMENT AND  
FINANCIAL ANALYSIS**

**COURSE CODE: ECO305 /ECON 308**

**TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS:**

1. Answer Question 1 and any other two questions
2. The Relevant Annuity tables are provided

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

### **Question 1(Compulsory)**

- a) Write explanatory notes on any five of the following concepts
- i) The major differences between the NPV and IRR methods
  - ii) Contingent projects and mutually exclusive projects
  - iii) The Programme Review and Evaluation Technique (PERT)
  - iv) Disadvantages of the internal rate of return
  - v) Project and programme [5 marks each]
- b) Suppose a project requires an initial investment of E18,000 and would generate equivalent annual cash flows of E5,600 p.a. to be received at the end of each of the next 5 years. The required rate of return for this investment is 12%. Determine the internal rate of return for this project. [15 marks]
- c) What guides the choice of a discount rate? Why is it impractical to make a choice of a discount rate in real life? [10 marks]

**Total Marks = 50 marks]**

**ANSWER ANY TWO (2) QUESTIONS FROM THE FOLLOWING:**

### **Question 2**

- a) What are the main features of the Critical Path Method (CPM) as a project planning and control technique? [5 marks]
- b) "Projects are a necessary ingredient to planning, and so is planning to projects", explain the logic of this statement. [5 marks]
- c) What is the project life cycle? Discuss the various phases of the project life cycle and explain why the first stage is regarded as an integral part of project planning? [15 marks]

**Total Marks = [25 marks]**

### Question 3

a) A company is considering a major expansion of its product line and has estimated the following cash flows associated with such an expansion. The initial outlay associated with the expansion would be E2,500,000 and the project would generate incremental after-tax cash flows of E750,000 per year for six years. The appropriate required rate of return is 11%

- a) Calculate the net present value
- b) Calculate the profitability index
- c) Calculate the internal rate of return
- d) What is the project's payback period (PBP)
- e) Should the project be accepted? [20 marks]

b) Why would the NPV and IRR methods sometimes give conflicting results on the decision to accept or reject a project proposal? [5 marks]

**Total Marks = [25 marks]**

### Question 4

a) A company makes a product which sells for E15, while the variable cost per unit is E5, which covers labour and material. The fixed cost total is E75, 000 per annum which covers all the overhead costs. Using Break Even Analysis:

i) Calculate the break even point and draw diagrams to show all the costs and break even point. [10 marks]

ii) Assume the company is anticipating to produce 12,000 units, would you advise it to make this investment? Justify your answer by determining either a loss or profit associated with this amount of investment. [5 marks]

b) What kinds of projects are best suited to break even analysis? What are the shortcomings of this technique? [10 marks]

**Total Marks = [25 marks]**