

**CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

Semester 1 Examinations 2009/10

Module Title: Development Economics 3A

Module Code: BULD7010

School: School of Building & Civil

Programme Title: **Bachelor of Science in Construction Economics
Bachelor of Science in Construction Management**

Programme Code: **CCECO_7_Y3
CMNGT_7_Y3**

External Examiner(s): **Mr. G. O Rourke, Mr. P. Quinn, Mr. N. Dempsey, Mr. T. Cahalane**

Internal Examiner(s): **Mr. D. Coveney**

Instructions: **Please answer THREE questions.
All questions carry equal marks.**

Duration: **2 Hours**

Sitting: **Winter 2009**

Requirements for this examination:

Note to Candidates: Please check the Programme Title and the Module Title to ensure that you have received the correct examination.
If in doubt please contact an Invigilator.

Q1. A manufacturer produces 50,000 roof lights per year and sells them at €420 per unit. Fixed costs are €6,250,000 and variable costs are €11,500,000.

- (a) Determine the company's break even points (12 Marks)
- (b) If the company raises their profit target by €400,000 show the break-even volume in each case where the company realised its increased profit by:
 - (i) Increasing their unit selling price? (7 Marks)
 - (ii) Cutting their fixed costs? (7 Marks)
 - (iii) Cutting their variable costs? (7 Marks)

Q2. Joining the Economic & Monetary Union (Euro) removed the built in economic warning signs which were available to us under the Punt,

- (i) What were these indicators? (24 Marks)
- (ii) In Ireland's case what do you consider has been the result? (9 Marks)

Q3. Discuss the reasons why the property market does not operate efficiently & smoothly.

(33 Marks)

Q4. **Capital Investment**

The promoters of an investment opportunity put together an investment in an office block in Paris at a cost of €100,000,000 commencing 1st January 2006.

- 50 investors were required to fund the scheme, each investor contributing €400,000; these investment funds were to be used to gear up the borrowings for the remainder of the funds required.
- Our investor has €100,000 on deposit with an opportunity cost of 2% and will borrow the remaining €300,000 @ 4% fixed for the term of the loan.
- The rental income from the offices is €4M net per annum
 - Investors will receive no income as the rent will be used to service the borrowed funds, pay management fees, etc.
- Money is originally borrowed at 4% but at the end of year two the rate is reduced to 3%.
- This is a prime location investment, therefore, the investor yield required is 4%; as interest rates are reduced the investor yield is reduced to 3.33% on this type of investment.
- On the 1st January 2008 in line with the letting agreement the rent is reviewed, but because of the recession the new rent is €3.50M per annum.
- The investment is sold on 1st January 2009 at a yield of 3.3%.

Calculate the net outcome for our investor.

(33 Marks)