**Mid Term Test**

You can either solve this question a piece of paper, or in Excel. Please submit detailed workings via my courses.

**NPV and Sensitivity (20 marks)**

South North LTD are considering a 3 year project. The initial investment of £200,000 was in machines and 10% of its original value will be recoverable at the end of the project. The cost of capital is 9%. Tax is at 14% paid one year in arrears. Writing down allowance is 18%.

Most likely scenario:

Annual sales (26,000 units at £6): £156,000

Annual costs:

 Labour £40,000

 Materials £30,000

Annual Cash Flow £86,000

1. Calculate NPV and profitability index for **the above** scenario.

**(8 Marks)**

1. Draw **a sensitivity graph** showing the sensitivity of NPV to changes in Labour. Provide an interpretation of your results.

**(5 Marks)**

1. Compute **all sensitivity ratios** for the project.

**(4 Marks)**

1. Given the inflation rate of 5%, work out the money rate for the cost of capital.

 **(3 Marks)**