GX 2281

OLLSCOIL NA hÉIREANN, GAILLIMH

NATIONAL UNIVERSITY OF IRELAND, GALWAY

SEMESTER I EXAMINATIONS 2000/2001

HIGHER DIPLOMA IN BUSINESS STUDIES

FINANCIAL MANAGEMENT 1 – AY872

Professor N. Garrod
Professor J.F. Collins
Ms. E. Mulligan

Time Allowed: 2 $^{1}/_{2}$ Hours

Candidates should answer the question in Section A and two questions in Section B.

Discount Tables attached.

SECTION A
(OBLIGATORY – 40 MARKS)

Question 1

Dempson Ltd. produces and sells a range of consumer and household goods. Jackie Murray, the product development manager, has identified an opportunity to produce and sell a new household product, and she provides you with the information set out below as a basis for a financial analysis of the proposal.

- Based on market surveys, she forecasts that sales will be as follows over the three-year life of the project:

Year 1	£150,000
Year 2	£250,000
Year 3	£150,000

- Variable production, marketing and distribution costs are expected to amount to 60% of sales revenue, leaving a contribution of 40% to cover fixed costs and to provide an element of profit. Fixed costs directly associated with the product line are expected to amount to £35,000 per year, excluding depreciation.

- Jackie does not expect that the introduction of the new product should require any additional expenditures on general administrative costs. However, company policy dictates that a charge equal to 10% of sales is levied on all product lines each year, representing an allocation of the general administrative costs of the overall company.

- Production equipment will cost £60,000, and it will be depreciated for tax purposes on a straight line basis assuming a zero residual value. However, the equipment is expected to have a pre-tax residual value of £10,000 at the end of year three.

- Additional working capital will also be required. Jackie has produced the following forecast of the required levels of working capital at various stages in the life of the project:

	Time 0	Time 1	Time 2	Time 3
Required Working Capital	£15,000	£25,000	£25,000	£0

- Taxes are levied on taxable profits at a rate of 20%, and you may assume that taxes are payable in the same year the liability arises.

(Question 1 continued over……

......Question 1 continued from previous page)

Required:

(a) Produce a table of after-tax cash flows attributable to the proposed product line for each year of the project's life

(18 Marks)

(b) Ignore the cash flows you have estimated in part (a), and assume that the cash flows attributable to the product line are as follows:

Time 0	Time 1	Time 2	Time 3
(£155,000)	£10,000	£100,000	£90,000

Note: This is not the answer to part (a).

Calculate the Net Present Value (NPV) of the project, taking into consideration the cost of capital which is estimated at 10%. Recommend whether the project should be accepted, and explain why you arrived at that conclusion.

(6 Marks)

(c) Using the cash flows presented in (b) above, calculate the internal rate of return on the project. Recommend whether the project should be accepted, and explain why you arrived at that conclusion.

(8 Marks)

(d) Again using the cash flows given in (b) above, calculate the payback period. Discuss the payback period as a basis for project assessment.

(8 Marks)
(Total: 40 Marks)

P.T.O

SECTION B
(ANSWER TWO QUESTIONS FROM THIS SECTION)

Question 2

Minton Ltd is a quoted company showing the following long-term capital structure in its balance sheet:

	£ Millions
Ordinary Share Capital:	
(2 million shares issued at £2 par)	4.0
Revenue Reserves	7.7
	11.7
12% Non Redeemable Preference Shares:	
(1.5 million of £1 nominal value)	1.5
10% Debentures	5.0
Total Capital Employed	18.2

The management of Minton Ltd consider the present capital structure proportions (in market value terms) as satisfactory and intend to maintain these proportions for the foreseeable future. The following additional information is available:

1. The company is profitable and tax is levied at 25%.
2. Growth in ordinary dividends has been steady over the past few years at 8% and this rate of growth is expected to continue. The company has recently paid a dividend of 70 pence per share. The ordinary shares are currently trading at £5.50 per share. Market analysis suggests a Beta value of .80, an expected rate of return on the market portfolio of 14%, and indicates that the current yield on short-term Government Debt is 4% per annum.
3. The preference shares are currently trading at £1.20 per share.
4. The company's debentures were issued some years ago at par value of £1,000 and are currently trading at £1,100 per £1,000 of debt. These debentures are due for redemption at par in eleven years time.

Required:

(a) (i) estimate the cost of each component of long term finance employed by Matrix Ltd. (In the case of equity taking an average of both the dividend valuation model and the capital asset pricing model) **and**
(ii) estimate the weighted average cost of capital for Matrix Ltd.

(22 Marks)

(b) given that the required rate of return for a security includes the risk-free rate of return and a risk premium, outline and explain the factors that go to determine or influence
(i) the risk-free rate
(ii) the risk premium

(8 Marks)
Total: 30 Marks
P.T.O.

Question 3

Part (a)

Zimp Ltd. manufactures small barbecue units for outdoor use. While the company sells to wholesalers and retailers on terms of net 30 days, the present average collection period is 40 days. Annual sales of barbecue equipment amounts to £720,000. The selling price per unit is £36, and the variable production, selling, and distribution costs amount to £20 per unit. Fixed costs of £8 per unit are also allocated to the output of barbecues. At present, bad debts amount to 1% of sales. The cost of capital for working capital investment is 12% per annum.

Zimp wishes to expand sales, and is considering increasing the period of credit offered to customers. Two options are under consideration, as follows:

	Option A	Option B
Increase in Average Collection Period	20 Days	40 Days
Expected Increase in Yearly Sales	£ 80,000	£ 100,000
Expected Overall Bad Debts Losses	1½ % of Sales	2 % of Sales

Required: (Assume a 360-day year in all calculations):
Present calculations to show whether or not the company should change its credit terms, and, if so, whether Option A or Option B should be adopted.

(15 Marks)

Part (b)

When a company decides to grant credit to its customers, it should develop an overall policy for managing debtors. Outline **two** elements of such a policy and indicate the considerations involved in deciding on the appropriate policy to adopt for each of these elements of overall policy.

(15 Marks)
Total: 30 Marks

Question 4

Discuss **two** of the following topics in the context of financial management:

(a) The advantages and disadvantages of raising finance using debt and the advantages and disadvantages of raising finance using equity capital, both from the perspective of the company seeking to raise the finance.
(b) "The objective of the firm is to maximise the value of the firm". Discuss how the achievement of this objective might be compromised by the conflicts which may arise between the various stakeholders in an organisation.
(c) The importance for a firm of having a working capital policy and the factors which influence such a policy.

(15 Marks each topic)
Total: 30 Marks