

Programme Code: TU814
Shared with: N/A
Module Code: TECN 3003
CRN: 37019

TECHNOLOGICAL UNIVERSITY DUBLIN
CITY CAMPUS - BOLTON STREET

TU814 – Sustainable Transport Management

Year 3

SEMESTER 1
EXAMINATIONS 2023/24

Financial Management 2

Internal Examiner: Brendan Meehan, B.Comm, FCCA, AITI MIRTE

External Examiners: Prof. Washington Yotto Ochieng
Mr. Jarlath Sweeney

Exam Duration: 2 HOURS

Instructions: Answer ANY 3 of the following 6 questions

Special Instructions/Handouts: N/A

QUESTION 1.

Moore Manufacturing Limited manufactures a standard component for the vehicle assembly market. Each unit of produce is sold for €9 per unit. The variable cost of manufacture is €3 per unit and monthly fixed costs are €36,000 per month.

- a) Represent the above information on a breakeven chart showing clearly the breakeven output. (10 marks)
- b) What will be the profit or loss arising on sale of 8,000 units (5 marks)?
- c) On account of inflationary conditions, arising mainly from increases in energy costs, the variable cost of manufacture has increased to €5 per unit. If the selling price remains at €9 per unit, what is the revised breakeven output? (5 marks).
- d) What do you understand by the term “Contribution”? (5 marks)

TOTAL 25 MARKS

QUESTION 2.

Part A:

Diskin Fabrications Limited manufactures a standard product. Budgeted sales for the next four months are as follows:

February	16,400 units
March	18,800 units
April	22,600 units
May	24,200 units

The company produces to meet sales. However, to avoid the possibility of stockouts, it also budgets to have in stock at the end of any month, 30% of the following month's sales requirement. The stock of finished good on 1st February is expected to be 4,400 units.

Prepare a Production Budget for the quarterly period ending on 30th April 2024.

(13 marks)

Part B:

Give five of the principle objectives of Budgetary Control. (12 marks)

TOTAL 25 MARKS.

QUESTION 3:

Part A.

Paul Morris manages the vehicle servicing department in a large car dealership. There are two other departments in the business - Vehicle Sales and Parts Sales. The three departments share the following annual costs:

Administration	€30,000
Light and Heat	€12,000
General Insurances	€24,000
Rates on premises	€8,000
Annual Rent	€28,000

It has been agreed that these costs should be apportioned to the individual departments on a floor area basis. The Motor Services Department occupies 40% of the total floor area of the business.

Other annual costs that are specific to the Motor Services Department are:

Mr. Morris' Salary	€50,000
Repairs & Maintenance	4,000
Materials & Lubricants	12,000
Equipment Leasing	16,000

There are four mechanics employed who each work a 39 hour week. They are entitled to 4 weeks annual leave and there are 10 bank holidays per year. They are each paid €36,000 per annum.

The profit required from the Motor Services Department is 20% of all costs, both specific and apportioned. The department charges out its work at an average billing rate of €60 per hour.

Mr. Morris has asked you to compute the required minimum efficiency of the Motor Services Department. (20 Marks)

Part B.

What do you understand by the term "General Overheads" (5 Marks)

TOTAL 25 MARKS

QUESTION 4.

- What are the essential features of an effective system of credit control? (12 marks)
- Distinguish, giving examples, between fixed costs and variable costs (6 marks)
- What are the principle assumptions of Breakeven Analysis? (7 marks)

TOTAL 25 MARKS.

QUESTION 5.

Part A:

“The Gross Profit Margin is considered to be an essential economic statistic of a trading business”.

What is the Gross Profit Margin and give examples of known margins in certain trading sectors? What concerns would you have if the Gross Profit Margin computed, unexpectedly, below that of prior trading periods? (10 Marks)

Part B:

A retail franchise business is listed for sale in the commercial property listing. The guide price for the business is €560,000. Though the business has traded successfully for many years, it is considered that it still has potential for growth by promotional expenditure towards the market segment and also by enhancement expenditure on the premises. The total of these expenditures will be an additional €60,000.

Jonathon Smith is interested in acquiring the business and intends to borrow the full €620,000 required. The repayments over 20 years at current interest rates will be €4,500 per month.

The estate agent handling the sale has indicated that the turnover of the existing business in the last year was €820,000.

The following information on annual overheads has been determined:

Light and Heat	€6,000
Telephone and postage	€2,000
Printing & Stationery	€2,000
Insurances	€16,000
Repairs & Maintenance	€12,000
Rent & Rates	€80,000
Wages (2 persons)	€62,000
Total projected overheads	€180,000

The Gross Margin from this sector is 40%.

Mr. Smith considers that he requires an income of €80,000 per annum.

Determine for Mr. Smith whether or not he should proceed with the purchase of this business. (15 Marks)

TOTAL 25 MARKS.

QUESTION 6.

Miriam and Peter Smith each hold 50% of the capital of Smith Traders Limited. Peter has reached 65 years and has decided to retire and wants to cease all involvement in the company. He is prepared to offer his 500 shares to Miriam for €320,000 (making the total value of the company €640,000).

Miriam has asked you to advise her whether this offer represents a fair valuation. To assist you, she has provided you with the most recent financial results:

<u>PROFIT AND LOSS ACCOUNT</u>	
Profit before interest and tax	71,000
Interest on loans	12,000
Profit before tax	59,000
Taxation	7,000
Profit after tax	52,000

<u>BALANCE SHEET</u>	
Property & non business assets	460,000
Stocks	20,000
Debtors	132,000
Bank and Cash Balances	158,000
	770,000
Ordinary Shares (€1.00 each)	1,000
Retained Profits	229,000
Term Loans	340,000
Trade Creditors	200,000
	770,000

A typical Price/Earnings Ratio of a listed company operating in this sector is 6.0.

- a. Calculate the:
- Gearing Ratio (3 marks)
 - Return on Capital Employed (or ROCE) (3 marks)
 - Times Interest Covered Ratio (3 marks)
 - Earnings Per Share (3 marks).
- b. Calculate the value of the company and determine whether the offer of €320,000 should be accepted by Miriam. (13 marks)

TOTAL 25 MARKS.