

Programme Code: TU721
Shared with: N/A
Module Code: AVTE 3100
CRN: 20726

TECHNOLOGICAL UNIVERSITY DUBLIN
CITY CAMPUS - BOLTON STREET

TU721 – BTechEng Aviation Technology

Year 3

SEMESTER 2
EXAMINATIONS 2023/24

Management (Accounting)

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

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Exam Duration: 2 HOURS

***Instructions: Answer any four of the following questions.
All questions carry equal marks.***

Special Instructions/Handouts: N/A

QUESTION 1.

- a) The Sales estimate is often considered to be the “key factor” in the budget setting process. Getting the sales estimate correct is a function of the “marketing mix”. What do you understand by the term “Marketing Mix”? (8 marks)
- b) Jones Aviation Components Limited manufactures a standard component for supply to the aircraft maintenance sector. The sales estimate has been compiled and the company now requires you to prepare a production budget for the next 3 months. Estimated sales for the next four months are set out below:

Month:	(Units)
June 2024	9,200
July 2024	10,000
August 2024	10,400
September 2024	11,200

The stock policy adopted by the company is to have in stock, at the end of any month, 20% of the following month’s sales expectation. The stock of finished units on 1st June will be 1,780 units.

Prepare a Production Budget for June, July and August 2024. (12 marks).

- c) What are the principle objectives of budgetary control? (5 marks)

TOTAL 25 MARKS.

QUESTION 2.

- a) What essential information, both financial and non financial, should be provided by a business in support of an application for finance? (10 marks)
- b) Financial Institutions tend to seek some form of security from companies when advancing loans to fund business activities. This is often done by registering a charge in the Companies Registrations Office over the assets owned by the company. In this regard, explain “Fixed Charge” and “Floating Charge” as means of securing debt. (10 marks)
- c) What are “Preferred Creditors” ? (5 marks)

TOTAL 25 MARKS.

QUESTION 3.

Part A:

For Trading Companies (i.e. companies that purchase goods with a view to selling on at a profit), it is important that they determine the Gross Profit Margin that arises from their operations. Explain the term “Gross Profit Margin” and set out why this ratio is such an important economic statistic for business. Give examples of known margins that prevail in some business sectors. (10 Marks)

Part B:

Below is the most recent Balance Sheet prepared for Air Parts Distributors Limited. During the year under review, the company has suffered an adverse movement on its bank balances but, at the same time, enjoyed profits of €26,000 (as evidenced by the increase in retained profits) . The Balance Sheet figures for the last 2 years are set out below:

<u>BALANCE SHEET AS AT 31 MARCH:</u>					
	2024	2023		2024	2023
	€	€		€	€
SHARE CAPITAL	1,000	1,000	FIXED ASSETS	140,000	40,000
BALANCE ON P&L A/C	88,000	62,000			
TERM LOAN	134,000	84,000			
CURRENT LIABILITIES:			CURRENT ASSETS:		
Creditors	25,000	15,000	Stocks	55,000	45,000
Bank Overdraft	17,000	-	Debtors	70,000	45,000
			Bank	-	32,000
	<u>265,000</u>	<u>162,000</u>		<u>265,000</u>	<u>162,000</u>

As part of your review of the company’s financial position, you are required to prepare a Cash Flow Statement for the year ended 31st March 2024 as a means of reconciling the profit for the year with the adverse movement on the bank account.

(15 marks)

TOTAL 25 MARKS

QUESTION 4.

- a) In relation to availing of differing sources of finance that are available to businesses in Ireland, explain what you understand by “Financial Hedging”? (4 marks)
- b) Explain any three long-term sources of finance making reference to aspects of security, interest cost and title to assets. (12 marks).
- c) As long as businesses carry stocks and debtors, they need to avail of short term finance to tie them over. In this context, list and explain any 3 short-term sources of finance. (9 marks)

TOTAL 25 MARKS.

QUESTION 5:

- a. The principle objective of Credit Control procedures is to avoid bad debts and to secure prompt payment from customers for goods and services provided. Set out the essential features of an effective system of credit control making reference to evaluation of potential customers and monitoring compliance of existing customers. (10 marks)
- b. You are given the following key data from a company's financial statements in relation to the management of debtors:

	2023	2022	2021
Sales	7,300,000	6,400,000	6,800,000
Gross Profit	2,336,000	2,432,000	2,618,000
Bad Debts	160,600	96,000	108,800
Debtors	1,200,000	859,200	864,200

b.1: Compute for each year:

- Gross Margin (3 marks)
- Bad debts % (3 marks)
- Debtors Days (3 marks)

b.2: Using your computations at b.1) above, what concerns would you have on the effectiveness of the credit control department? (6 marks)

TOTAL 25 MARKS.

QUESTION 6:

- a) What are the principle characteristics of the Limited Liability Company form of business organisation (6 marks).
- b) Distinguish between the Memorandum and Articles of Association of a Limited Liability Company? (8 marks)
- c) What are the main advantages of the limited company form of business entity over other forms? Are there any disadvantages? (6 marks)
- d) What are the three conditions which a company must satisfy in order to qualify to be a Private Limited Company and what exemptions from the requirements of the Companies Acts do Private Companies enjoy? (5 marks)

TOTAL 25 MARKS.

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OUTLINE SOLUTIONS

QUESTION 1: BUDGETARY CONTROL:

a) **Marketing Mix** – elements are known as the “4 P’s” of Marketing: Product Demand – Pricing Policy – Promotion Methods – Place of Consumption (brief description of each giving examples). (8 marks)

b) **PRODUCTION BUDGET**

Month	June (units)	July (units)	August (units)	Sept. (units)
Sales Budget	9200	10000	10400	11200
Less opening Stock	-1780	-2000	-2080	
	<u>7420</u>	<u>8000</u>	<u>8320</u>	
Add Target ending stock	2000	2080	2240	
Required Production	<u>9420</u>	<u>10080</u>	<u>10560</u>	(12 Marks)

c) **OBJECTIVES OF BUDGETARY CONTROL:**

- to plan and control income and expenditure
- to direct capital expenditure in most profitable direction
- to provide a yardstick against which actual results are compared
- to determine the impact on the budget when unforeseen events occur
- to motivate staff by setting achievable targets.
- to identify adverse trends and make corrections (“management by exception” principle).

(5 marks)

QUESTION 2: FINANCE AND SECURITY:

- a) Information to support a loan application – to include:
- Most recent accounts
 - History of the firm
 - Description of the products or services offered
 - Background of the principles – CV, work experience, education etc
 - Market segment targeted and advantages over other competitors
 - Existing competitors
 - Financial Projections for next 12 months and assumptions adopted.
 - Likely future developments in the sector. (10 marks)
- b) **Fixed Charge:** a charge on a specific asset or group of assets – the company is not free to deal or alter the asset pledged – the charge must be registered in Companies Office by the bank – in the event of default, the bank may appoint a receiver to seize the asset and recover the debt – fixed charge creditors rank first in order of repayment in a liquidation. (5 marks)

Floating Charge: a general charge on all assets of the company both present and future – used where company has no substantial assets aside from trading assets – the company is free to deal in the assets pledged – the charge must similarly be registered in the Companies Office by the bank – in a liquidation, creditors secured by a floating charges rank after fixed charge creditors and also after another category Preferred Creditors. (5 marks)

- c) **Preferred Creditors:** are creditors that are set out in the Companies Act that include – Unpaid Wages and holiday pay – unpaid taxes (Vat, Paye etc) – redundancy payments – unpaid rates. Preferred creditors rank ahead of other creditors for repayment in a liquidation except for those creditors secured by a fixed charge who rank ahead of them. (5 marks)

QUESTION 3 :

PART A:

GROSS MARGIN: for trading companies, profit is arrived at in 2 stages. First stage is to determine the Gross or Trading Profit. When Gross Profit is expressed as a % of sales, this figure is known as “Gross Margin”. This can then be compared with previous years or with known industry norms. Any deviation should be investigated and explained.

Known margins in key sectors are:

- Motor Factors 50% - 60%
- Forecourt Sales (fuels) 5%
- Freight Forwarding 15%
- Travel Agency 10% to 12%

Competitive factors can cause a decline in gross margin. But also, a decline that is not expected can be due to theft or other defalcations due to poor controls especially over custody of stocks and recording of sales in a cash business. (10 marks)

PART B: CASH FLOW STATEMENT FOR YEAR END 31 MARCH 2024:

PROFIT FOR YEAR	26000
Adjust for change in working capital items:	
Increase in Stocks	-10000
Increase in Debtors	-25000
Increase in Creditors	10000
Source / - Use from operations	<u>1000</u>
OTHER SOURCES	
Increase in Loans	50000
OTHER USES	
Increase in Fixed Assets	<u>-100000</u>
NET SOURCE / -USE OF FUNDS	<u>-49000</u>
Represented by:	
Opening Bank and Cash balances	32000
Closing Bank and Cash balances	<u>-17000</u>
Adverse movement on Bank and Cash	<u>-49000</u>

(15 marks)

QUESTION 4: SOURCES OF FINANCE:

- a) Financial Hedging: the purpose of the borrowing will determine the nature and source of the finance obtained. For example, a long term purpose such as to acquire a warehouse would require a long term source such as a term loan or debenture mortgage. (4 marks)
- b) Long term sources: Share Capital – Retained Earnings – Term Loans – Debenture Mortgage – Hire Purchase finance – Lease finance. (12 marks)
- c) Short term sources: Trade Credit – bank overdrafts – factoring – commercial finance / invoice discounting. (9 marks)

(For all sources of finance referred to, students to set out: Description / Interest Cost / Security given to lender, (if any) / Capital Allowances where source used to finance qualifying assets / Title to the assets under the arrangement.)

QUESTION 5: CREDIT CONTROL:

A) Features:

- Good documentation flow over each stage of a sales transactions to avoid disputes with customers
- Formal assessment of potential customers for credit worthiness by means of credit rating agency report, review of most recent accounts filed in Companies Office, provide trade references.
- Maintenance of a timely and reliable Sales Ledger system.
- Regular review of age listing of balances for correctness and identification of non compliance with credit terms.
- Revise regularly credit terms and limits based on customer performance.
- Review of accounts for consistency in Debtors Days and Bad Debts % ratios as means of benchmarking performance of credit control department.
- Good documentation flow at each stage of transaction – use of Official Order Form – Delivery Notes (Proof of Delivery) – Formal Sale Invoice (setting out goods, price and VAT rate)

(10 marks)

B) Computations and analysis:

Ratio	2023	2022	2021
Gross Margin (GP/Sales) *100	32%	38%	38.5%
Bad Debts % (Bad Debtors/Sales)*100	2.2%	1.5%	1.6%
Debtors Days (Debtors/Sales) * 365	60 days	49 days	46 days

(9 marks)

Comments:

- Gross Margin has fallen. Likely that company has reduced sales prices to remain competitive.
- Increase in Bad Debts % is indicative of difficult trading conditions and incurrance of bad debts. It suggests that the company needs to evaluate new customers more carefully for credit worthiness.
- Debtor's days has increased. Likely that customers are taking longer to settle their account and that the company may be offering better credit terms to attract new customers and / or retain existing customers in a more competitive environment.

(6 marks)

QUESTION 6 LIMITED COMPANIES:

- (b) **Characteristics:** Separate legal entity – can sue and be sued in own name – shareholders liability to creditors is limited to their paid up capital – regulated by Companies Act 2014 – must prepare and file financial statements each year with Companies Registrations Office – in small companies, directors and shareholders are the same individuals – in large companies, Board of Directors are separate but must act in the interests of all shareholders. (6 marks)
- (c) **Memorandum:** sets out information for those not directly involved in the company. 5 clauses: Name Clause – Objects Clause – Limited Liability clause – situation of registered office – Directors written consent to act. **Articles:** the set of rules which bind the members together including: When meetings should be convened – how resolutions are submitted and tabled - what is a “quorum” – borrowing limits on directors – rights of minority shareholders in voting. (2 @ 4 marks)
- (d) **Advantages:** - separate legal entity from shareholders – shareholders enjoy “Limited Liability” - greater access to capital for viable companies with growth prospects – company can succeed the death of a shareholder as shares are transferrable property. **Disadvantages:** - compliance with Companies Acts – share valuation difficult to obtain for unlisted companies – full statutory financial statements must be prepared in accordance with Companies Act and with Financial Reporting Standards. (6 marks)
- (e) **Private Companies:** - must limit number of members to no more than 50 – prohibit the invitation to the public to subscribe for shares – shares cannot be freely transferable among the members. Exemptions: exempt from statutory audit if meets size criteria – exemption from filing full financial statements, most often just an abridged balance sheet is filed.

(5 marks)