

TU814/2

TECN 2105

**TECHNOLOGICAL UNIVERSITY DUBLIN**  
BOLTON STREET CAMPUS

BACHELOR OF SCIENCE (HONOURS) IN TRANSPORT  
OPERATIONS AND TECHNOLOGY

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**SECOND YEAR: SEMESTER 1**

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FINANCIAL MANAGEMENT 1

OUTLINE SOLUTIONS

QUESTION 1: FINAL ACCOUNTS

MURRAY AUTOS LIMITED: TRADING PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 31<sup>ST</sup> MARCH 2022.

	€	€	€
SALES			480,200
LESS COST OF SALES			
Opening Stock		32,900	
Add Purchases		240,400	
		<u>273,300</u>	
Less closing stock		-26,000	247,300
GROSS PROFIT			<u>232,900</u>
LESS EXPENSES:			
Light & Heat		16,800	
Advertising		2,800	
Accountancy		3,500	
Insurances	10,200	0	
Less prepaid	<u>-2,800</u>	7,400	
Motor Expenses		7,500	
Rent & Rates		40,300	
Telephone		18,300	
Trade Expenses		14,400	
Wages & Salaries	96,400	0	
Add amount due	<u>1,600</u>	98,000	
Bank Interest and Charges		2,100	
Depreciation – fixtures		11,700	
Depreciation – Plant		<u>7,280</u>	230,080
NET PROFIT			2,820
ADD BALANCE ON P&L b/fwd			<u>50,100</u>
BALANCE ON P&L c/fwd			<u>52,920</u>

(13 Marks)

BALANCE SHEET AS AT 31<sup>ST</sup> MARCH 2022.

	€	€	€
FIXED ASSETS:			
Fixtures & Fittgs at Cost	46,800		
Less Cumul Deprec'n	<u>-29,300</u>	17,500	
Plant at cost	36,400		
Less Cumul Deprec'n	<u>-26,080</u>	10,320	27,820
CURRENT ASSETS:			
Stocks		26,000	
Debtors		58,200	
Bank		5,600	
Prepaid Insurances		2,800	92,600
			<u>120,420</u>
Financed by:			
ORDINARY SHARES (€1 EACH)			1,000
BALANCE ON P&L ACCOUNT			52,920
TERM LOAN			19,500
CURRENT LIABILITIES			
Creditors		45,400	
Wages Due		<u>1,600</u>	47,000
			<u>120,420</u>

(12 marks)

## QUESTION 2 – INTERPRETATION OF ACCOUNTS

### a. Computation of ratios:

FORMULA	2021	2020
Current Ratio: Current assets / current liabilities (ideal 2)	$(520,000 \div 386,000) = 1.35$	$(568,000 \div 136,000) = 4.18$
Acid Test Ratio: (Current Assets less Stock) / current liabilities (ideal 1)	$((520,000 - 320,000) \div 386,000) = 0.52$	$((568,000 - 126,000) \div 136,000) = 3.25$
Debtors Days: (debtors / sales) x 365 = days	$(200,000 \div 1,850,000) \times 365 = 39$ days	$(146,000 \div 1,674,000) \times 365 = 32$ days
Creditors Days (creditors / COS) x 365 = days	$(170,000 \div 1,332,000) \times 365 = 47$ days	$(136,000 \div 1,138,000) \times 365 = 44$ days
Stock turnover: COS / closing stock = times	$(1,332,000 \div 320,000) = 4.1$ times	$(1,138,000 \div 126,000) = 9$ times
Gross Margin: Gross profit as % sales	$(518,000 \div 1,850,000) \times 100 = 28\%$	$(536,000 \div 1,674,000) \times 100 = 32\%$
Net Margin: Net Profit as % sales	$(266,000 \div 1,850,000) \times 100 = 14\%$	$(256,000 \div 1,674,000) \times 100 = 15.2\%$
Overheads per month: o/h's divided by 12	$(252,000 \div 12) = 21,000$	$(280,000 \div 12) = 23,300$

(16 marks)

### b. Comments: (to include some or all of the following):

- Increase in fixed assets of €800,000. Long term borrowing only increased by €236,000 to finance this. So much of the overdraft was used to fund the balance which is an inappropriate use of short term funds. Company should increase borrowings to replenish the bank account using the fixed assets as security.
- Declines in current ratio to below 2 and the acid test ratio to below 1 indicate a decline in solvency and possible solvency issues – though computations are not significantly below norms.
- Increase in Debtors Days suggests that credit control procedures should be reviewed and the age list examined for the existence of possible bad debts.
- Stock turnover has decreased. The stocks should be reviewed and any slow moving or obsolete items identified and further orders stopped.
- Creditor Days have increased a small bit. The company appears to be enjoying the same level of credit from suppliers.
- Significant fall in Gross Margin indicates that the sector is more competitive and margins and prices were dropped to generate more sales (have increased 10%).
- Despite increase in sales of 10%, monthly overhead have decreased and therefore the company appears to be reaping economies of scale.

(9 marks)

### QUESTION 3: SOURCES OF FINANCE

- a) Three long term sources from:  
Share Capital – Retained Earnings – Term Loans – Debenture Mortgage – Hire Purchase finance – Lease finance.  
*(For each source of finance referred to, require: 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)* (12 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. (4 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 charge rank after fixed charge creditors and also after another category Preferred Creditors. (4 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 4: LIMITED COMPANIES:

- a. Limited Liability – the shareholders of a company enjoy “Limited Liability”. Their liability for the debts of a company are limited to the amount of their investment in shares. Their personal assets are not available in the event of a claim against the company. (4 marks)
- b. Principle Features: 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. (8 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. (8 marks)
- d. 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. Exemptions: From filing full financial statements and, if meets size criteria, exemption from full statutory audit. (5 marks)

QUESTION 5:

Part A: CASH FLOW STATEMENT

PROFIT FOR YEAR	26000
Adjust for changes in working capital items:	
Increase in Stocks	-10000
Increase in Debtors	-25000
Increase in Creditors	<u>+10000</u>
Source / - Use from operations	1000
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)

Part B: Credit Control:

Essential elements – good documentation flow – formal system of evaluation of new customers – proper maintenance of sales ledger – sending monthly statements – review of age list for slow payers – orders referred to credit controller where credit limit exceeded.

(10 marks)

QUESTION 6 – CAPITAL GEARING:

a. Computation of ratios:

	LOOP	HOOK
Gearing Ratio: (debt / debt + equity) x100	$(1200k/3600k) \times 100 = 33\%$	$(3840k /4800k) \times 100 = 80\%$
Return on Capital Employed (ROCE): PBIT / (Debt + Equity) x 100	$(630k /3600k) \times 100 = 17.5\%$	$(840k/4800k) \times 100 = 17.5\%$
Average cost of debt = (interest / debt) *100	$(84k/1200k) \times 100 = 7\%$	$(252/ 3840k) \times 100 = 6.6\%$
Interest cover: (PBIT / Interest) = times	$630k / 84k = 7.5$ times	$840k / 252k = 3.3$ times
Earnings Per Share: (Profit after tax / no. of shares)	$465k / 1500k = \text{€}0.31$ per share	$501k /300k = \text{€}1.67$ per share

(4 @ 3 marks = 12 marks)

b. Risk Return Factor:

- Hook is more highly geared
- Both companies are using funds borrowed at ~ 6½ to 7% to earn returns of 17.5%.
- Loop is lowly geared and has more shares in issue. So it has lower Earnings Per Share. Hook, as a consequence of higher debt, has lower Interest Cover
- Risk to Hook is if interest rates rise and there is a sudden decrease in profitability, interest cover will be small or negative and there will be no return to shareholders.
- In general, high gearing is only attractive when the funds borrowed are used to earn a return significantly in excess of the interest cost – as is the case for Hook. (13 marks)