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TECHNOLOGICAL UNIVERSITY DUBLIN
CITY CAMPUS - BOLTON STREET

TU814 – Sustainable Transport Management

Year 3

SEMESTER 1
EXAMINATIONS 2024/25

Financial Management 2

**Internal Examiner(s): Professor Stephen J Wright BSc PGCE PhD
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Answer any *three* questions.

All questions carry equal marks.

Time Allowed: 2 hours

Monday

6th January 2025

14.00 – 16.00

QUESTION 1.

Part A:

Hi Tec Motor Services Limited is a company engaged in the motor industry. They require you to compute the minimum efficiency to be derived from the workshop having regard to the following information:

There are four mechanics engaged in the workshop who are paid €32,000 per annum basic wage. They receive 4 weeks holidays per year and are entitled to 10 bank holidays. The working week is 39 hours.

The Workshop occupies 50% of the total floor space of the enterprise and engages 60% of all employees. General Overheads to be apportioned to user departments on an appropriate basis are as follows:

Rent	€18,000
Rates	10,000
Light & Heat	13,000
Administration	50,000

Aside from Mechanics' Wages, the only overheads specific to the workshop are:

Supervisor's Salary	50,000
Depreciation Equipment	8,000

The required profit from the Workshop is 20% of all workshop costs. Mechanics' time is charged out at €55.00 per hour.

REQUIRED:

Compute the required minimum workshop efficiency.

(Show all workings to the nearest €1.)

(20 Marks)

Part B:

Explain what you understand by the term "General Overheads".

(5 Marks)

Total 25 Marks

QUESTION NO. 2

A.B. Assemblers makes a standard product which it sells for €24.00 per unit. Fixed costs are €19,200 per month and the variable cost of manufacture is €12.00 per unit.

REQUIRED:

- a) Prepare a breakeven chart and from your chart determine the breakeven output (6 marks)
- b) Calculate the profit arising on production of 2,200 units. (5 marks)
- c) Calculate by formula the revised Breakeven Output if fixed costs increase by 15% per month. (5 Marks)
- d) If selling price increases to €32.00 per unit, what will be the profit arising on sale of 2,000 units (5 marks).
- e) Define "Contribution". (4 Marks)

(Note: Consider Parts c) and d) independently).

Total 25 Marks

QUESTION 3.

Answer any *two* of the following three questions (each carry equal marks):

- A. What are the essential elements of a good system of credit control? (12½ marks)
- B. Distinguish, giving examples, between fixed costs and variable costs. (12½ marks)
- C. What is "Capital Gearing" and explain the risk-return factor of high levels of gearing in business? (12½ marks)

Total 25 Marks

QUESTION 4.

A. Jive Talk Products Limited manufactures a standard product. Demand is of a seasonal nature with production peaking in August of each year. Each unit of product has a raw material cost of €160.00.

Expected production for the next four months of activity is:

June 2013	3,100 units
July 2013	3,500 units
August 2013	3,800 units
September 2013	2,900 units

On 1st of June, it is anticipated that stock levels of Raw Material will be €290,000. It is the company's inventory policy to have 60% of the raw material required for production in any month in stock at start of that month.

Prepare a Raw Material Purchases Budget for the quarter ended 31st August 2013.
(15 marks)

B. Give six of the principle objectives of Budgetary Control.
(10 marks)

Total 25 Marks

QUESTION 5.

Part A:

What is “Gross Margin” and explain its importance as a key economic statistic of a business sector?
(10 Marks).

Part B:

Paul O’Neill has asked you to assist him in determining whether he should proceed with the purchase of a retail business which is being advertised for sale.

The business is a retail franchise business and the guide price for the business is €140,000. Paul will further require to invest additional funds to cover promotional expenditure and enhancement costs in the amount of €20,000.

Paul has obtained loan approval for the full amount to be invested of €160,000. The repayments over 20 years at 7% will be €1,180 per month.

The auctioneer has indicated that the turnover of the existing business in the last full year of trading was €340,000.

The following information on costs has been determined:

Light and Heat	€3,200
Telephone and postage	2,200
Printing & Stationery	1,600
Insurances	5,200
Wages (2 persons)	35,000
Repairs & Maintenance	2,000
Rent & Rates	<u>22,000</u>
Total projected overhead	€71,200

The Gross Margin from this sector is 40% and Paul considers that he requires an income of €40,000 per annum.

Determine for Paul whether or not he should go ahead with the purchase of this business.
(15 Marks)

Total 25 Marks

QUESTION NO. 6

The Director of a private trading company are seeking to retire and have received an offer for the company of €2.2 million. There are 10,000 shares in issue and they are held equally by the two directors.

To assist you in determining whether the valuation should be accepted by the Directors, you are provided with the most recent financial results of the company:

PROFIT AND LOSS ACCOUNT

Profit before interest and tax	€320,000
Interest	<u>18,000</u>
Profit before tax	302,000
Taxation	<u>40,000</u>
Profit after tax	<u>262,000</u>

BALANCE SHEET

Property & non business assets	560,000
Stocks	20,000
Debtors other receivables	132,000
Bank and Cash Balances	<u>158,000</u>
	<u>870,000</u>
Ordinary Shares (€1.00 each)	10,000
Retained Profits	430,000
Term Loans	280,000
Creditors & Accruals	<u>150,000</u>
	<u>870,000</u>

A typical price earnings ratio of a publicly quoted company in this sector is 5.8.

- a. Calculate the:
- Gearing Ratio (3 marks)
 - Interest Cover (3 marks)
 - Earnings per share (3 marks).
- b. Calculate the value of the company and determine whether the offer of €2.2 million should be accepted by the Directors. (16 marks)

Total 25 Marks