NCUK

NCUK INTERNATIONAL YEAR ONE BUSINESS

IDBMA001 Management Accounting

2020-2021

Examination Session	**Time Allowed**
Semester 2	3 Hours 30 Minutes

INSTRUCTIONS TO STUDENTS

SECTION A **Answer ALL questions. This section carries 35 marks.**

SECTION B **Answer 2 questions ONLY. This section carries 40 marks.**

The marks for each question are indicated in square brackets [ ].

The total mark for this paper is 75.

- Answers can either be typed or handwritten on paper. Once complete, any handwritten work must be clearly scanned or photographed and then inserted into a word-processed document for submission.
- Work must be submitted in a single word-processed file.
- You **MUST** show **ALL** of your workings.
- An approved calculator may be used in the examination.
- All work must be completed independently and without accessing unauthorised materials. The penalty for Examination Misconduct is a mark of zero.
- Work must be submitted by the deadline provided. Your Study Centre can be contacted for guidance on submission of work and cannot comment on the contents of the assessment.

Section A
Answer ALL questions. This section carries 35 marks.

Question A1

A company budgeted to produce 3,000 units of a single product in a period at a budgeted cost per unit, built up as follows:

	£ / unit
Direct costs	12
Variable overhead	5
Fixed overhead	9
	____
	£26
	____

In the period covered by the budget:

- Actual sales were 3,500 units and inventory levels decreased by 300 units.
- Actual fixed overhead expenditure was 5% above that budgeted.
- Other costs were as budgeted per unit.

Calculate the fixed overhead under/over absorption. **[5]**

Question A2

A company manufactures two products P1 and P2 in a factory divided into two cost centres, X and Y. The following budgeted data are available:

	Cost centre	
	X	*Y*
Allocated and apportioned fixed overhead costs	£88,000	£96,000
Direct labour hours per unit:		
Product P1	3.0	1.0
Product P2	2.5	2.0

Budgeted output is 8,000 units of each product. Fixed overhead costs are absorbed on a direct labour hour basis.

What is the budgeted fixed overhead cost per unit for Product P2? **[5]**

Question A3

(a) The budgeted profit to be achieved from product T next period is as follows:

	Product T
	£
Revenue	8,308
Variable costs	6,290
Contribution	2,018
Fixed costs	884
Budgeted profit	1,134

(i) What is the revised budgeted profit if the unit selling price is reduced by 10 per cent and as a result the volume of sales is increased by 15 per cent? **[3]**

(ii) What is the revised budgeted profit if sales volume is reduced by 5 per cent and unit variable costs are increased by 8 per cent? **[3]**

(b) Explain and discuss the advantages and disadvantages for Market Skimming and Penetration Pricing. **[10]**

Question A4

Delon Ltd manufactures and sells three products with the following selling prices and variable costs:

	Product A	***Product B***	***Product C***
	£ / unit	**£ / unit**	**£ / unit**
Selling price	3.00	2.45	4.00
Variable cost	1.20	1.67	2.60

Existing annual sales volume of the three products is:

Product A	460,000 units
Product B	1,000,000 units
Product C	380,000 units

Annual fixed costs are currently £1,710,000 per annum.

What is the current breakeven sales revenue for Delon Ltd? **[6]**

Question A5

(a) A company manufactures and sells one product. Budgeted sales units for the next period are 5,500.

Opening inventory is expected to be 400 units and planned to increase by 50% by the end of the period.

What is the production budget in units? **[2]**

(b) Define the term ‘Sunk cost’. **[1]**

Section B
Answer 2 questions only. This section carries 40 marks.

Question B1

Z plc manufactures three products which have the following selling prices and costs per unit:

	Z1	*Z2*	*Z3*
	£	£	£
Selling price	15.00	18.00	17.00
Direct materials	4.00	5.00	10.00
Direct labour	2.00	4.00	2.00
Overhead:			
Variable	1.00	2.00	0.90
Fixed	4.50	3.00	1.35
	11.50	14.00	14.25
Profit per unit	3.50	4.00	2.75

All three products use the same type of labour. However labour is in short supply only 500 hours of labour are available. Labour is paid at £8.00 per hour.

The maximum sales demand for each product – Z1, Z2 and Z3 is 800 units

(a) Establish the optimum production plan for Z plc. Clearly showing the number of Z1, Z2 and Z3 should be produced. **[9]**

(b) Explain the management accounting technique Throughput Accounting and discuss whether it would be appropriate for Z plc. **[5]**

(c) Explain Zero Based Budgeting and Incremental Budgeting stating which would be more appropriate for Z plc. **[6]**

Question B2

(a) ABC plc, a group operating retail stores, is compiling its budget statements for 2022. In this exercise revenues and costs at each store A, B and C are predicted. Additionally, all central costs of warehousing and a head office are allocated across the three stores in order to arrive at a total cost and net profit of each store operation.

In previous years the central costs were allocated in total based on the total sales value of each store. But as a result of dissatisfaction expressed by some store managers alternative methods are to be evaluated.

The predicted results before any re-allocation of central costs are as follows:

	A	*B*	*C*
	£000	£000	£000
Sales	5,000	4,000	3,000
Costs of sales	2,800	2,300	1,900
Gross margin	2,200	1,700	1,100
Local operating expenses			
Variable	660	730	310
Fixed	700	600	500
Operating profit	840	370	290

The central costs which are to be allocated are:

	£000
Warehouse costs:	
Depreciation	100
Storage	80
Operating and despatch	120
Delivery	300
Head office:	
Salaries	200
Advertising	80
Establishment	120
Total	1,000

The management accountant has carried out discussions with staff at all locations in order to identify more suitable 'cost drivers' of some of the central costs. So far, the following has been revealed:

	A	*B*	*C*
Number of despatches	550	450	520
Total delivery distances (thousand miles)	70	50	90
storage space occupied (%)	40	30	30

1 An analysis of senior management time revealed that 10% of their time was devoted to warehouse issues with the remainder shared equally between the three stores.

2 It was agreed that the only basis on which to allocate the advertising costs was sales revenue.

3 Establishment costs were mainly occupancy costs of senior management.

This analysis has been carried out against a background of developments in the company, for example, automated warehousing and greater integration with suppliers.

(a) Calculate the budgeted net profit of each store based on the sales value allocation base originally adopted. **[3]**

(b) Calculate the budgeted net profit of each store using the additional information provided? **[14]**

(c) Discuss the extent to which an improvement has been achieved in the information now available to the company on the costs and profitability of running the stores. **[3]**

Question B3

Orange Plc. are a manufacturing company. They sell and produce a heavy machinery mechanism. The accountants have set about the task of gathering information, which will be useful in the planning of the final four months' trading up to 31st October 2021. The results of their information gathering is as follows:

Estimated Production Data

Estimated selling price per mechanism £250
Estimated materials usage per mechanism one kilogram (Kg)
Estimated cost of materials per Kg £45
Estimated production wages and variable overheads per mechanism £65
Estimated fixed overheads per month £3000

	July	**Aug**	**Sept**	**Oct**
Estimated sales of mechanisms (units)	110	115	110	80
Estimated production mechanisms (units)	100	120	110	70
Estimated purchases of raw materials (Kg)	100	110	100	60

Purchase of New Equipment

Orange plc. has decided they need some new equipment costing in total £110,000 it will be delivered in July and paid for in August.

They have made arrangements for the company to take out a loan to the value of £130,000 with an interest rate payable of 10% capital repayment to be repaid in the year 2025.

Interest on the loan will be paid by two six-monthly instalments, in arrears.
£130,000 will be credited to the company's bank account on 1st August 2021.

Depreciation per month for July to October

Buildings	£333
Machinery	£15,200 (includes depreciation on new equipment)
Vehicles	£5,400

Credit terms

- All sales are on credit and two months' credit is allowed.
- All purchases of raw materials are on credit and are paid for one month following purchase.
- Wages, variable and fixed overheads are paid in the month in which they are incurred.

Statement of financial position balances

At the end of June 2021 Orange plc had a bank overdraft of £17,250
Accounts receivables for May £5,900 and for June £13,100
Accounts payable balance for June £3,900

Proposed Dividend

Orange Plc. intends to propose a dividend of 5% in October 2021.

(a) Prepare and present the cash budget for each month from July to October 2021 inclusive. **[18]**

(b) Explain the overall cash position of Orange Plc at the end of October 2021. **[2]**

- This is the end of the exam -