## **UNIVERSITY OF BOLTON**

### **GREATER MANCHESTER BUSINESS SCHOOL**

## **BA (HONS) ACCOUNTANCY**

### **SEMESTER TWO EXAMINATIONS 2023/24**

### MANAGEMENT ACCOUNTING FUNDAMENTALS

**MODULE NO: ACC4016** 

Date: Thursday 16th May 2024

Time: 10.00am - 1.00pm

#### **INSTRUCTIONS TO CANDIDATES:**

There are <u>SIX</u> questions on this paper.

Answer <u>BOTH</u> questions in section A, <u>ONE</u> question from section B and <u>ONE</u> question from section C.

This is a closed book examination.

# Section A Both questions are compulsory

## Question 1 TRANSACTIONS DURING MAY 2022

|                         | Quantity | Unit cost | Total cost    |
|-------------------------|----------|-----------|---------------|
|                         | Units    | £         | £             |
| Opening balance, 1 May  | 100      | 2.00      | 200           |
| Receipts, 3 May         | 400      | 2.10      | 840           |
| Issues, 4 May           | 200      |           | <b>Y</b> ,    |
| Receipts, 9 May         | 300      | 2.12      | 636           |
| Issues, 11 May          | 400      |           |               |
| Receipts, 18 May        | 100      | 2.40      | 240           |
| Issues, 20 May          | 100      |           |               |
| Closing balance, 31 May | 200      |           |               |
|                         |          |           | <u> 1,916</u> |

#### Required:

A. Complete the closing value of stock separately using FIFO, LIFO and AVCO

30 Marks

- B. Briefly discuss your understanding of the following key terms in stock control: -
  - Economic Order Quantity
  - Re-Order levels
  - JIT Stock Control Systems

10 Marks

**Total 40 Marks** 

#### Question 2

Dooley Ltd is considering which of two mutually exclusive projects it should undertake. The finance director thinks that the higher NPV should be chosen whereas the managing director thinks that the one with the higher IRR should be undertaken. The company anticipates both machines having a lifespan of 5 years. The company's cost of capital is 10% and the net after tax cash flows of the projects are as follows: -

| Year | Machine X | Machine Y |
|------|-----------|-----------|
| 0    | -450,000  | -600,000  |
| 1    | 160,000   | 246,000   |
| 2    | 160,000   | 196,800   |
| 3    | 160,000   | 172,200   |
| 4    | 100,000   | 102,500   |
| 5    | 150,000   | 202,500   |

#### Required

1. Calculate the NPV and IRR of each project.

10 Marks

2. Justify, with reasons, which project you would undertake (if either)

5 Marks

3. Contrast the inconsistency in ranking of the two projects in view of the remarks of the directors.

5 Marks

4. Explain the uses, limitations and merits of NPV and IRR methods of investment appraisal.

5 Marks

**Total 25 Marks** 

#### Section B- Answer 1 question from this section

#### **Question 3**

Gilkes Limited power tools. The budgeted production costs For 25,000 power tools for May 2024 was as follows:

**Direct materials** 

10,000 kilos at £6 per kilo £60,000

Direct labour

1,000 hours at £7.00 per hour £7,000

Actual results were as follows:

No. of power tools produced: 26,500

Direct material

11,300 kilos at £5.00 per kilo £56,500

Direct labour

980 hours at £7.80 per hour £7,644

#### Required:

- (a) Calculate the following variances for May 2024:
  - (i) total material variance
  - (ii) direct material usage
  - (iii)direct material price
  - (iv)total labour variance
  - (v) direct labour efficiency
  - (vi)direct wage rate

12 Marks

(b) Discuss the strengths and weaknesses of setting standard costs on the basis of Ideal, Attainable, Current and Basic standards.

8 Marks Total 20 Marks

#### **Question 4**

Babcock's Management are concerned that they may not be manufacturing the correct mix of products in one of the divisions, Metolux. Output in this division is limited at the moment because of machine capacity and other bottleneck operations.

At present the company is manufacturing three products (A, B, and C) in this division, using the same machines.

The following estimates have been made in respect of the next financial year:

| Product              | Α      | В      | С      |
|----------------------|--------|--------|--------|
|                      | £/unit | £/unit | £/unit |
| Selling price        | 80     | 90     | 50     |
| Variable material    | 40     | 36     | 20     |
| cost                 |        |        |        |
| Variable labour cost | 20     | 14     | 12     |
| Variable overheads   | 15     | 10     | 8      |
|                      | Hours  | Hours  | Hours  |
| Time per unit        | 2      | 5      | 3      |
| required on          |        |        |        |
| machines             |        |        |        |

Fixed overhead costs for the next financial year are expected to be £ 120,000.

The maximum machine capacity in the next financial year is 40,000 hours.

The forecast demand for each of the products for the next year is:

Product A 6,000 units
Product B 4,000 units
Product C 5,000 units

#### Required:

a) Make a detailed analysis of product mix for Metolux producing a profit statement which maximises contribution for the business.

12 Marks

b) Critically evaluate the application of the theory of constraints in a modern business environment.

8 Marks

**Total 20 Marks** 

# Section C Answer 1 question from this section

#### **Question 5**

Evaluate the use and purpose of Marginal Costing for the modern-day organisation when trying to decide whether to undertake a short-term business opportunity.

**Total 15 Marks** 

#### **Question 6**

Critically evaluate the different budgeting methods public sector and private sector businesses can use to aid control and performance management.

**Total 15 Marks** 

**END OF QUESTIONS** 

**END OF EXAM**