## SUBJECT:

DATE:
TIME:

## Accounting

$4^{\text {th }}$ September 2023
4:00 p.m. to 7:05 p.m.

This paper contains FOUR sections. Follow the instructions below.

## SECTION A

Answer all FIVE questions in this section. Each question carries 4 marks.

## SECTION B

Answer question 6 . This question carries 30 marks.

## SECTION C

Answer any ONE question from this section. This section carries 25 marks.

## SECTION D

Answer any ONE question from this section. This section carries 25 marks.
You must show the working leading up to your answers.
Candidates may only use non-programmable calculators in this examination.

## SECTION A

## Answer all FIVE questions in this section. Each question carries 4 marks.

1. The distinction between variable and fixed costs elements is important for Cost-Volume-Profit (CVP) analysis.
(i) Explain the terms 'contribution', 'the break-even point' and 'the margin of safety'.
(ii) Draw a break-even chart, and mark the budgeted profit, break-even point and the margin of safety.
2. Labour costs refers to the remuneration paid to employees. There are various ways how production workers can be remunerated. Describe the following methods of remuneration, explaining the ideal circumstances when each method should be used:
(i) time rate and overtime;
(ii) piece rate; and
(iii) bonus on time saved.
3. Referring to inventory control, explain how each of the following levels are calculated and the significance of each:
(i) economic order quantity;
(ii) minimum inventory level;
(iii) maximum inventory level; and
(iv) the reorder level.
4. (i) What is a Manufacturing account? Why is it prepared?
(ii) What is the link between the Manufacturing account and the Statement of Profit or Loss?
5. Identify FOUR users of accounting information and their information needs.

## SECTION B

## Answer Question 6. This question carries $\mathbf{3 0}$ marks.

6. Jackson Limited extracted the following trial balance as at 31 March 2023:

|  | C | C |
| :--- | ---: | ---: |
| Ordinary share capital (€0.50 per share) |  | 500,000 |
| General reserve |  | 70,000 |
| Retained earnings |  | 45,000 |
| Premises / Depreciation allowance | 850,000 | 80,000 |
| Equipment / Depreciation allowance | 152,000 | 58,128 |
| Motor vehicles / Depreciation allowance | 80,000 | 44,600 |
| Trade receivables / Payables | 43,500 | 31,600 |
| Inventory | 34,600 |  |
| Bank |  | 28,400 |
| Cash | 3,200 |  |
| Bank Loan |  | 100,000 |
| Sales |  | $1,430,000$ |
| Purchases | 764,000 |  |
| Wages | 76,000 |  |
| Salaries | 78,000 |  |
| Electricity | 33,500 |  |
| Bad debt | 11,350 |  |
| Bank overdraft interest | 710 |  |
| General distribution expenses | 93,100 |  |
| Administration expenses | 79,200 |  |
| Allowance for expected losses on trade |  | 2,175 |
| receivables | 7,800 |  |
| Audit fees | 14,300 |  |
| Insurance | 17,000 |  |
| Warehouse rent | 11,600 |  |
| Motor vehicles running costs | 2,400 |  |
| Carriage in | 5,900 |  |
| Carriage out | 38,428 | 26,775 |
| Discount allowed / Discount received | 17,000 |  |
| Directors' remuneration | 17,500 | 23,010 |
| Returns in / Returns out | $\mathbf{2 , 4 3 9 , 6 8 8}$ | $\mathbf{2 , 4 3 9 , 6 8 8}$ |
| Advertising expenses |  |  |
|  |  |  |
|  |  |  |

## Additional information:

a) Provide for depreciation on non-current assets at the following rates:

| Premises | $5 \%$ on cost |
| :--- | :--- |
| Equipment | $15 \%$ on cost |
| Motor vehicles | $40 \%$ on written down value |

Note that $20 \%$ of the cost of premises relates to land.
b) Closing inventory at cost amounted to $€ 44,390$. It included goods originally purchased for $€ 7,600$, which are now outdated and can only be disposed of at a quarter of their initial cost.
c) All motor expenses, including the charge for depreciation of motor vehicles, are to be apportioned equally between carriage in and carriage out.
d) Amounts due at 31 March 2023 included:

|  | C |
| :--- | ---: |
| Administration expenses | 6,300 |
| Salaries | 11,400 |
| Audit fees | 8,300 |

e) Prepaid expenses at 31 March 2023 included:

|  | $\mathbf{C}$ |
| :--- | ---: |
| Insurance | 7,100 |
| Warehouse rent | 4,500 |

f) A credit risk assessment of the trade receivables at the end of the year, identified a balance of $€ 5,200$ as high risk to default.
g) The company borrowed the loan from the bank three years ago. It bears interest of 6\%, payable annually.
h) Advertising costs included $€ 5,600$ incurred for a TV promotional campaign appearing in June 2023.
i) Apart from their remuneration, the directors' agreement stipulates that they are to share between them a commission of $10 \%$ of profit accruing during the year after charging same commission.
j) It is company policy to transfer $20 \%$ of net profit to the General Reserve.

## Required:

A. Prepare Jackson Limited's Statement of Profit or Loss for the year ended 31 March 2023.
B. Prepare the company's Statement of Financial Position as at 31 March 2023.
C. Distinguish between Memorandum of Association and Articles of Association.
(Total: $\mathbf{3 0}$ marks)

## SECTION C

## Answer ONE question from this section. This section carries $\mathbf{2 5}$ marks.

7. Fuselage plc is considering the take over of a new venture to expand its market share. Below are the summarised Statement of profit or loss and the Statement of financial position of Fuselage plc for the twelve months ended on 31 March 2023 and the corresponding results of the new venture:

|  |  | Fuselage plc |  | New Venture |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | C | C | C | C |
| Statement of Profit or Loss |  |  |  |  |  |
| Sales |  | 480,000 |  | 90,000 |  |
| Cost of sales |  | 288,000 |  | 42,000 |  |
|  |  | 192,000 |  | 48,000 |  |
| Expenses |  | 50,000 |  | 11,500 |  |
| Bank interest |  | 4,000 |  | 500 |  |
| Profit |  | 138,000 |  | 36,000 |  |
| Statement of Financial Position |  |  |  |  |  |
| Non-current assets |  |  | 160,000 |  | 60,000 |
| Current assets: | Inventories | 94,000 |  | 9,500 |  |
|  | Trade receivables | 82,000 |  | 4,500 |  |
|  | Prepayments | 16,000 |  | 1,500 |  |
|  | Bank and cash | 18,400 | 210,400 | nil | 15,500 |
|  |  |  | 370,400 |  | 75,500 |
| Share capital: 180,000 shares of $€ 1$ each |  | 180,000 |  |  | 50,000 |
| Share Premium |  | 30,000 |  |  |  |
| Retained earnings |  | 70,000 | 280,000 |  |  |
| Bank loan |  |  | 60,000 |  |  |
| Current Liabilities: | Trade payables | 22,800 |  | 16,500 |  |
|  | Other payables | 7,600 |  | 2,500 |  |
|  | Bank Overdraft | nil | 30,400 | 6,500 | 25,500 |
|  |  |  | 370,400 |  | 75,500 |

Notes:
a) At the beginning of the twelve-month period under review, Fuselage's opening inventories amounted to $€ 76,000$ and those of the new venture were $€ 13,500$.
b) $30 \%$ of Fuselage plc sales and $10 \%$ of purchases were on cash terms; while $40 \%$ of the new venture's sales were for cash, but all purchases were on credit.

## Required:

A. Compute the following ratios based on the data on page 4 for the year ended 31 March 2023 for BOTH Fuselage plc and the new venture:
(i) gross profit margin;
(ii) return on Capital Employed (ROCE);
(iii) current ratio;
(iv) acid test or quick ratio;
(v) inventory turnover;
(2)
(vi) trade receivables collection period;
(vii) trade payables payment period; and
(viii) sales as a percentage of capital employed.
B. Highlight the main strengths and weaknesses of the new venture and advise Fuselage plc on whether it should continue with its take over plans.
8. The Statement of Financial Position of Aeronaut Trading Ltd as at 31 December 2021 showed the following non-current assets:

| Asset | Original cost (C) | Date of acquisition |
| :--- | ---: | :---: |
| Lorry AC | 18,000 | 1 April 2018 |
| Lorry BD | 11,400 | 1 January 2020 |
| Motor Van | 13,600 | 1 October 2019 |
| Equipment | 36,400 | 1 July 2019 |

## Valuation (C)

## Loose tools <br> 3,200

The motor van was purchased as a used vehicle and was expected to have a useful life of 4 years with $10 \%$ of its purchase price estimated as its residual value. The estimated residual value of all other assets is nil.
It is company policy to charge a full year's depreciation in the year of acquisition but none in the year of disposal. The company depreciates its non-current assets as follows:

Motor Vehicles (except for the motor van) $40 \%$ on net book value
Equipment 20\% on original cost
During the year ended 31 December 2022, the following transactions took place:
a) On 1 March 2022, Lorry AC was part-exchanged for a new Lorry FG costing $€ 32,800$. The trade in allowance for the old lorry was $€ 3,200$.
b) Equipment includes computers. Computers with original cost $€ 16,400$ were considered outdated for the company's purposes and were donated to an educational institution. A new network of computers costing $€ 28,000$ was installed on 1 October 2022.
c) Other equipment was purchased on 1 March 2022 costing $€ 7,600$.
d) During the same year, $€ 2,600$ was spent on loose tools. On 31 December 2022, loose tools were valued at €4,200.

## Required:

For the year ended 31 December 2022, prepare for Aeronaut Trading Ltd:
A. The ledger accounts for Motor Vehicles, Equipment and Loose Tools.
B. The Allowance for Depreciation Accounts for Motor Vehicles and Equipment.
C. The disposal accounts, including transfers to the Statement of Profit or Loss.
D. An extract from the Statement of Financial Position.

## SECTION D

## Answer ONE question from this section. This section carries $\mathbf{2 5}$ marks.

9. Rotate plc is a wholesaler of white goods. It is in the process of preparing its budgets for the four months commencing 1 January 2024. It has prepared the following estimates:

| Sales: | Year 2024 | C |
| :--- | :---: | :---: |
|  | January | 2900,000 |
|  | February | 3200,000 |
|  | March | 3600,000 |
|  | April | 4800,000 |

In the months following the budget period, sales are projected to be maintained at the same level as April's.

Throughout the four months, $20 \%$ of sales are to be for cash. The sales for November and December 2023 are estimated to be $€ 1,800,000$ and $€ 2,400,000$, respectively. Sales are made at a uniform profit margin of $40 \%$.

Purchases are to be made at the end of each month in amounts sufficient to supply the sales of the following month.

Trade receivables: 40\% of trade receivables are to settle in the month following the sale and the rest a month later.

Trade payables: all suppliers of goods are to be paid in two equal instalments in the two months following the purchase.

Wages: Employees are paid at the end of each month. Wages amount to $€ 16,000$ monthly for January and February, but, according to an agreement already reached, this is to increase to $€ 20,000$ for the following months.

Expenses: In July, income tax for the year 2023 of $€ 224,000$ falls due and is to be settled. Rent of $€ 76,000$ per annum is paid in two equal instalments, one of which falls due in April 2024. Other running expenses amount to $€ 28,000$ per month. These are settled at the end of each month.

The projected bank balance as at 1 January 2024 is $€ 21,400$ (debit).

## Required:

A. Prepare the Cash Budget of Rotate plc for the four-month period commencing January 2024, including balances to be carried down at the end of each month.
B. Calculate the balances for trade receivables, trade payables, inventory, accruals and prepayments as at 30 April 2024.
(Total 25 marks)
10. A company produces two products - masks and flippers. All units produced need to go through two production centres, namely, Centre $Y$ and Centre $Z$. The details of the cost schedule to produce one unit of each product are as shown below:

## Masks

| Material A: | 1.5 kgs at $€ 4.00$ per kg | 3 kg at $€ 4.00$ per kg |
| :--- | :---: | :---: |
| Material B: | 1 glass piece at $€ 1.50$ per unit | -- |
| Labour: |  |  |
| Centre Y | 2 hours at $€ 10.00$ per hour | 1 hours at $€ 10.00$ per hour |
| Centre Z | 3.5 hours at $€ 14.00$ per hour | 5 hours at $€ 14.00$ per hour |
| Machine Hours: |  |  |
| Centre Y | 1 hours | 3 hours |
| Centre Z | 2 hours | 3.5 hours |

The budget for 2023 was based on a production of 12,000 masks and 8,000 pairs of flippers. The total fixed production overheads for the year have been budgeted at $€ 100,000$ for Production Centre $Y$ and $€ 80,000$ for Production Centre $Z$.

## Required:

A. Calculate the overhead recovery rate (correct to two decimal places) based on:
(i) Machine hours for Production Centre Y; and
(ii) Labour hours for Production Centre $Z$.
B. Calculate the amount the company must charge for an order of 10 masks and 10 pairs of flippers if it is to realise a profit margin of $25 \%$.
(Total 25 marks)

