## ADVANCED MATRICULATION LEVEL 2022 FIRST SESSION

| SUBJECT: | Accounting |
| :--- | :--- |
| PAPER NUMBER: | I |
| DATE: | $5^{\text {th }}$ May 2022 |
| TIME: | $4: 00$ p.m. to $7: 05$ p.m. |

This paper contains THREE sections. Follow the instructions below.

## Section A

Answer any FIVE questions from this section. Each question carries 4 marks.

## Section B

Answer question 8. This question is compulsory and carries 30 marks.

## Section C

Answer any TWO questions from this section. Each question 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 any FIVE questions in this section. This section carries a total of $\mathbf{2 0}$ marks.

1. Mary Jane is an accounts clerk responsible for the nominal ledger. At the end of the year, she extracts a trial balance from the accounting system, which she passes on to the accountant. She cannot understand why the accountant cannot just simply take the account balances as shown in the trial balance in order to prepare the statement of profit or loss and the statement of financial position.
Explain to Mary Jane why year-end adjustments are required. Provide TWO examples to illustrate your answer.
2. At the end of every financial year, Kate extracts a trial balance from the accounting system and gives it to the accountant. Kate is aware that the accountant uses the trial balance as a basis to prepare a full set of financial statements for the company. She is not really sure, however, why the accountant has to prepare the financial statements in the first place. Explain to Kate why the accountant is required to draw up a set of financial statements, and name SIX users of such financials statements.
3. In the trial balance extracted from the accounting system at the end of the year, Jessica notes a credit balance of $€ 14,000$ relating to the Value Added Tax account. She concludes that it is revenue because it is a credit balance.
Do you agree with Jessica? Support your answer by explaining to Jessica how the credit balance of $€ 14,000$ has arisen, and describe its treatment in the financial statements of the company.
4. Karl Borg is an auto and marine engineer. He provides services from his office and the adjoining fully equipped garage. At a recent reception, he was seated next to one of his clients, who is a director of an established company. The client asked Karl how come he has not formed a company and is still operating as a sole trader after all these years. Karl is not sure what his client was talking about, but was not willing to overlook any potential benefits. Describe the main difference between a sole trader and a limited liability company; and highlight TWO advantages and TWO disadvantages related to carrying out a business through a company.
5. Tom operates a printing press. He recently acquired a new piece of machinery costing $€ 50,000$, to replace an older machine that was no longer efficient. Tom's accountant asked him to specify the estimated useful life of the machine and its residual value. Tom cannot understand why this information is being requested. In his opinion, since the new machine is replacing an old one, then the whole amount of $€ 50,000$ should be written off as an expense because it is a replacement cost.
Explain to Tom why he is not correct, highlighting why the accountant is requesting this information relating to the new machine.
6. The financial performance of Victor's business has improved over time, and he is planning to expand his operations. This requires an investment in a new machine costing €50,000. However, Victor is not in a position to pay cash for the new machine. He can use his newly approved bank overdraft facility, which has a limit of $€ 50,000$. Alternatively, the bank can offer him a 5 -year loan at the same rate of interest.
Describe the difference between a bank overdraft and a short-term loan, and advise Victor as to the best way to finance the acquisition of the new machine.
7. The Managing Director of Investa Ltd is studying the projections of operations for 2023-2028 period. She notes a significant expansion which would need to be financed through new capital.
Describe to the Managing Director TWO sources of long-term finance. Provide ONE advantage and ONE disadvantage for each source of finance that you identify.

## SECTION B

## Answer Question 8 in this section. This question is compulsory and carries $\mathbf{3 0}$ marks.

8. Boris Valletta, the owner of an on-line trading business, presented the following trial balance for the reporting period ended 31 December 2021:

|  | C | C |
| :---: | :---: | :---: |
| Purchases / Sales | 326,410 | 795,350 |
| Carriage in | 3,600 |  |
| Carriage out | 12,800 |  |
| Returns in / Returns out | 15,300 | 9,700 |
| Inventories | 28,460 |  |
| Doubtful debt allowance /Allowance for expected credit losses |  | 3,100 |
| Wages and salaries | 198,060 |  |
| Rent payable | 11,400 |  |
| Electricity | 12,300 |  |
| Communication costs | 8,250 |  |
| Bad debts written off | 6,730 |  |
| Discounts allowed / Received | 31,810 | 21,300 |
| Insurance | 10,800 |  |
| General expenses | 25,900 |  |
| Motor running costs | 21,100 |  |
| Packing material purchases | 7,640 |  |
| Packing material inventory | 1,600 |  |
| Fixtures | 170,000 |  |
| Office equipment | 130,000 |  |
| Motor vehicles | 43,200 |  |
| Depreciation Allowance: Fixtures |  | 15,000 |
| Office equipment |  | 23,200 |
| Motor vehicles |  | 19,400 |
| Commission received |  | 11,200 |
| Rent receivable |  | 3,680 |
| Loan interest | 2,000 |  |
| 8\% Loan |  | 50,000 |
| Capital |  | 150,000 |
| Drawings | 5,210 |  |
| Accounts receivable / payable | 52,500 | 12,100 |
| Cash | 370 |  |
| Bank |  | 11,410 |
|  | 1,125,440 | 1,125,440 |

This question continues on next page.

Further information:
a) Inventories of goods at 31 December 2021 were valued at $€ 14,700$, and inventories of packaging totalled $€ 1,250$.
b) Commission receivable still due at year end amounted to $€ 860$.
c) The rent receivable arose from subletting unutilised storage space in the rented premises and $€ 440$ of rent receivable was received in advance.
d) Accrued expenses as at 31 December 2021:

|  | C |
| :--- | ---: |
| Electricity | 680 |
| General expenses | 1,220 |
| Wages | 5,140 |
| Rent payable | 560 |

e) As at 31 December 2021, insurance prepaid amounted to $€ 320$.
f) The allowance for doubtful debts at year end is to cover a balance of $€ 2,100$ due from a customer. Boris held serious doubts regarding its recoverability.
g) The depreciation charge for the year is to be calculated as follows:

| Fixtures | straight line over 8 years |
| :--- | :--- |
| Office equipment | $15 \%$ of cost |
| Motor vehicles | $40 \%$ on written down value |

h) Some fixtures and equipment were sold during the year. The sales proceeds and book values of these assets were:

|  | Cost | Depreciation | Proceeds |
| :--- | :---: | :---: | :---: |
|  | $\boldsymbol{C}$ | $\boldsymbol{C}$ | $\boldsymbol{C}$ |
| Fixtures | 8,000 | 6,800 | 2,200 |
| Office Equipment | 5,600 | 3,800 | 800 |

The only entries made in respect of these items was to record the cheques received in the bank and credit the non-current assets accounts with the amount realised. No other entries were made.
i) The bank balance in the trial balance was extracted from the cashbook. A standing order of $€ 740$ for an annual subscription of a trade magazine showing on the bank statement had not yet been entered in the cashbook.
j) Apart from drawings shown in the Trial Balance, Boris sent two of his employees for three days to build a garden shed in his private residence. The workers earn wages of $€ 320$ for a five-day week. Furthermore, part of the material used for the shed, costing €560, was taken from business goods.
k) All motor running expenses, including motor vehicles depreciation, are to be divided between carriage in and carriage out in the ratio of $3: 1$.
I) The 8\% Ioan was taken out in 2020, and is repayable in 2025.

## Required:

For year ended 31 December 2021, prepare Boris Valletta's:
A. Statement of Profit or Loss; and
B. Statement of Financial Position.
(Total 30 marks)

## SECTION C

## Answer any TWO questions from this section. Each question carries $\mathbf{2 5}$ marks.

9. The following are the statements of financial position for Green Tiger Limited for the years ended 31 December 2021 and 2020, respectively:

## Statement of Financial Position as at: 31 December 2021 c $\quad$ c <br> 31 December 2020 <br> c

| 186,667 | 210,000 |
| ---: | ---: |
| 292,500 | 450,000 |
| 180,000 | 90,000 |
| 231,500 | 45,000 |
| 890,667 | 795,000 |

Current Assets
Inventories
Trade Receivables
Other Receivables
Cash and Cash Equivalents

| 300,458 |
| :---: |

419,750
TOTAL ASSETS

EQUITY AND LIABILITIES
Ordinary share capital
Share Premium
Retained Earnings
Non-Current Liabilities
Bank Loan
125,000
Current Liabilities
Trade payables
Interest Payable
1,250,000
125,000
$1,214,750$

Total Current Liabilities
$\begin{array}{r}92,000 \\ \hline 1,467,000\end{array}$
$\begin{array}{r}1,000,000 \\ 75,000 \\ 53,000 \\ \hline 1,128,000\end{array}$
Non-Current Assets
Software
292,500
450,000
Machinery
Motor Vehicles

$$
1,721,625
$$

e) It is Green Tiger Limited's policy to account for a full year's depreciation in the year of acquisition and none in the year of disposal.
f) Motor vehicles are depreciated at $12.5 \%$ using the reducing balance method. New motor vehicles were acquired during the year, and there were no disposals.
g) Machinery is depreciated using the straight line method over 4 years. Machinery worth $€ 150,000$ was acquired in 2021, and there were no disposals.
h) Software is amortised over 10 years. There were no acquisitions and disposals of software during 2021.
i) The Premises are depreciated over 50 years using the straight line method. In 2021, the company sold a property with a carrying amount of $€ 150,000$ for a consideration of $€ 375,000$. No premises were acquired during the year.
j) The Other receivables shown in the Statement of Financial Position pertain to prepaid rent.

## Required:

A. Prepare a Statement of Cash Flows for Green Tiger Limited for the year ended 31 December 2021.
B. A junior accountant at Green Tiger limited overheard the Director saying that "it wouldn't be worthwhile holding too much inventory: although our products are profitable, inventory is rather illiquid."
Explain the concept of liquidity vs. profitability, and highlight ONE incentive that Green Tiger has taken to improve its liquidity position in 2021.
(Total: 25 marks)
10. The accountant of Aquamarine Retailers Ltd sadly passed away, and the directors did not have the password to access the accounting system. Furthermore, as he had been ill for quite some time, they seriously doubted the completeness of the entries recorded in the accounting system. They decided, therefore, to engage an accountancy firm to prepare the company's financial statements for the year ended 31 March 2022, and have compiled the following information relating to the financial year:
a) Bank transactions:

|  |  | C |
| :--- | :--- | ---: |
| Receipts: | Receipts from customers | 514,835 |
|  | $5 \%$ loan | 50,000 |
| Payments: | Electricity | 8,230 |
|  | Insurance | 5,340 |
|  | Wages | 38,600 |
|  | Payments to suppliers | 438,120 |
|  | Motor Vehicle | 5,600 |

b) The Ioan was taken on 1 April 2021. Loan interest for one year is still outstanding.
c) The motor vehicle purchased during the year cost $€ 15,600$. The balance was to be paid in four equal instalments during the following year.
d) Cash receipts from sales could not be ascertained but Aquamarine made the following cash payments:

|  | C |
| :--- | ---: |
| Weekly general expenses | 220 |
| Cleaner per week | 60 |
| Travelling expense monthly expense | 120 |
| Mobile telephone expenses per month | 40 |
| Church donation per month | 15 |
| Purchases | 2,920 |
| Deposits in bank | 11,110 |

e) Other records show:

| Discounts received / Discounts allowed | 8,640 | 6,800 |
| :--- | :---: | :---: |
| Returns in / Returns out | 9,400 | 7,600 |

f) Two customers owing $€ 1,260$ between them had defaulted; and a customer, who happened also to be a supplier, had a balance of $€ 840$ set off between his accounts.
g) Balances at the beginning and end of the year were as follows:

|  | $\mathbf{1 / 4 / 2 1}$ | $\mathbf{3 1 / 3 / 2 2}$ |
| :--- | ---: | ---: |
|  | $\mathbf{C}$ | $\mathbf{C}$ |
| Ordinary Share Capital | 100,000 | 100,000 |
| Retained earnings | 61,650 | $?$ |
| Trade receivables | 7,400 | 9,300 |
| Trade payables | 11,600 | 14,400 |
| Inventories | 6,800 | 12,500 |
| Bank (credit balance) | 22,100 | $?$ |
| Cash | 120 | 860 |
| Electricity accrued | 540 | 960 |
| Wages owing | 5,400 | 3,800 |
| Insurance prepaid | 370 | -- |
| Insurance owing | -- | 460 |
| Premises | 120,000 | $?$ |
| Fittings | 34,000 | $?$ |
| Motor vehicles | 32,600 | $?$ |
| 5\% loan | -- | 50,000 |

h) Non-current assets are shown at net book values. Depreciation is to be provided using the reducing balance method at $5 \%$ on premises, $30 \%$ on fittings and $40 \%$ on motor vehicles. A full year's depreciation is provided during year of acquisition, and none in the year of disposal.

## Required:

A. Prepare the Statement of Profit or Loss of Aquamarine Retailers Ltd for the year ended 31 March 2022.
B. Prepare the Statement of Financial Position of the company as at 31 March 2022.
C. The directors of Aquamarine Retailers Ltd would like to better understand the difference between a bad debt and an allowance for an expected credit loss (an allowance for doubtful debts). Explain the difference between the TWO terms, including the accounting treatment.
11. The Directors of Red Panda Limited are analysing a set of financial projections for the current year, 2022, and the next, 2023. The following are extracts from the respective Statements of Financial Position, and the Statements of Profit or Loss, given the change in strategy towards software development and services provision, and the introduction of stricter credit control in 2023:

| Statement of Financial Position |  |  |
| :---: | :---: | :---: |
|  | 2022 | 2023 |
|  | c | c |
| Property, Plant and Equipment (Book value) | 850,000 | 1,080,000 |
| Software |  | 580,000 |
| Inventories | 350,000 | 283,385 |
| Trade receivables | 192,500 | 26,250 |
| Cash and Cash Equivalents | 50,000 | 402,811 |
|  | 1,442,500 | 2,372,446 |
| Ordinary share capital ( $€ 1$ nominal value) | 700,000 | 750,000 |
| Share Premium | 100,000 | 150,000 |
| Revaluation Reserve | 200,000 | 200,000 |
| Retained earnings | 186,000 | 1,010,671 |
| Loan 10\% | 0 | 150,000 |
| Trade payables | 206,500 | 107,275 |
| Other payables | 50,000 | 4,500 |
|  | 1,442,500 | 2,372,446 |

Statement of Profit or Loss

| Sales | $2,700,000$ |  | $4,050,000$ |
| :--- | ---: | ---: | ---: |
| Cost of sales | $1,285,714$ |  | $2,131,579$ |
|  | $1,414,286$ |  | $1,918,421$ |
| Expenses | 875,000 |  | $1,093,750$ |
|  |  | $\mathbf{5 3 9 , 2 8 6}$ | $\mathbf{8 2 4 , 6 7 1}$ |

All sales were on credit.

## Required:

A. Prepare a short report to the directors of Red Panda Ltd highlighting the following changes for the years 2022 and 2023, in financial performance and position, using the accounting ratios indicated:
i. Profitability (ROCE, Gross Profit Margin and Net Profit Margin);
ii. Liquidity (Current Ratio, Acid Test Ratio); and
iii. Financing Structure (Gearing Ratio, Interest Cover).
B. Using your results from (A) and the respective financial statements' extracts provided, comment on the effectiveness of the strategy of increasing company value.
C. The directors of Red Panda Limited have asked whether these ratios shall be audited. Explain the roles of the financial accountant and the auditor, contrasting their responsibilities and reporting audience.
(Total: 25 marks)
12. Karman plc, an enterprise manufacturing units for the electronic industry, had the following balances on its books on 31 December 2021:

|  | c | c |
| :---: | :---: | :---: |
| Land \& Buildings/Depreciation Allowance | 990,000 | 182,000 |
| Plant and machinery/Depreciation Allowance | 210,000 | 63,000 |
| Furniture \& equipment/Depreciation Allowance | 120,000 | 48,200 |
| Motor vehicles/Depreciation Allowance | 110,000 | 22,300 |
| Bank balance | 51,970 |  |
| Trade receivables/Trade payables | 29,800 | 32,206 |
| Purchases/Sales | 284,700 | 818,726 |
| Expenses: Administration | 28,720 |  |
| Carriage: Raw materials | 8,300 |  |
| Carriage: Finished goods | 14,600 |  |
| Marketing | 15,360 |  |
| Royalties | 17,280 |  |
| Bad debts written off | 9,640 |  |
| Insurance | 18,300 |  |
| Repairs to buildings | 15,700 |  |
| Inventories: Raw materials | 11,420 |  |
| Work-in-progress | 21,560 |  |
| Finished goods at transfer prices | 20,020 |  |
| Wages: Direct wages | 109,650 |  |
| Other factory wages | 42,500 |  |
| Office salaries | 16,080 |  |
| Returns in/Returns out | 21,600 | 15,900 |
| Electricity: Factory | 18,710 |  |
| Offices | 11,970 |  |
| Provision for unrealised profit |  | 1,820 |
| Allowance for doubtful debts (expected credit losses) |  | 894 |
| Ordinary share Capital ( $¢ 0.50$ per share) |  | 650,000 |
| Share Premium |  | 150,000 |
| General Reserve |  | 80,000 |
| 4\% loan |  | 100,000 |
| Retained earnings |  | 32,834 |
|  | 2,197,880 | 2,197,880 |

Additional information:
a) All manufactured goods are transferred to finished goods inventories at a manufacturing profit of $10 \%$.
b) Inventories at 31 December 2021:

|  | C |
| :--- | ---: |
| Raw materials | 16,400 |
| Work-in-progress | 9,380 |
| Finished goods at transfer prices | 32,780 |

c) Insurance is to be divided equally between factory and administration. Three-fifths of depreciation and of repairs to buildings is to be charged to manufacturing. Motor vehicles were used exclusively for the carriage of finished goods to customers.
d) The Depreciation charge per annum is to be calculated as follows:

| Buildings | $5 \%$ on cost |
| :--- | :--- |
| Plant and machinery | $10 \%$ on cost |
| Office furniture and equipment | $20 \%$ on cost |
| Motor vehicles | $25 \%$ on written down value |

e) $€ 2,500$ of advertising costs, included in Marketing expenses, have been paid on account for a campaign scheduled for the forthcoming accounting period.
f) The insurance account includes a prepayment of $€ 2,200$.
g) A specific allowance of $€ 2,392$ is to be made to cover the doubtful recovery of a balance due from a customer.
h) Royalties are charged on units produced. During the year under review 10,800 units were manufactured but royalties were only paid on 9,600 units.
i) Loan interest has as yet, not been settled. Other accrued expenses are Office salaries € 4,800 and Office electricity $€ 800$.

## Required:

A. Prepare the Provision for Unrealised Profit account for the year ended 31 December 2021.
B. Prepare the Manufacturing account and the Statement of Profit or Loss of Karman plc for the year ended 31 December 2021.
C. Karman plc values its inventory of finished goods at transfer prices, however, inventory is required to be valued at the lower of cost and net realisable value in the Statement of Financial Position. Explain.
(Total: 25 marks)

## ADVANCED MATRICULATION LEVEL 2022 FIRST SESSION

| SUBJECT: | Accounting |
| :--- | :--- |
| PAPER NUMBER: | II |
| DATE: | $6^{\text {th }}$ May 2022 |
| TIME: | $9: 00$ a.m. to $12: 05$ p.m. |

This paper contains THREE Sections. Follow the instructions below.

## Section A

Answer any FIVE questions in this Section. Each question carries 4 marks.

## Section B

Answer question 8. This question is compulsory and carries 30 marks.

## Section C

Answer any TWO questions from this Section. Each question 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 any FIVE questions in this section. This section carries a total of $\mathbf{2 0}$ marks.

1. For a manufacturing concern, the units in the production budget could be different from the sales budget.
a) What would be the cause for such difference?
b) Why would a manufacturing concern decide to have such difference?
2. Tom is considering a job offer to work on the production line of Morning Ltd, a manufacturer of electronic components. The remuneration is calculated on units of production, with a guaranteed minimum weekly wage. Explain how such a remuneration scheme could be beneficial for: (a) Tom; and (b) Morning Ltd.
3. Star Ltd produces three types of products, all using the same raw material. The raw material is imported from the UK. During 2021, Star Ltd has found it difficult to import all raw materials required to satisfy customers' demands. An alternative raw material is not available. Describe how Star Ltd would decide on an adequate production plan that maximises its profits in such circumstances.
4. Raw materials can be directly traced to the unit of production, but it is very difficult to trace factory rent to the cost unit. Describe the cost accounting process that deals with factory rent and similar costs.
5. De Lux Ltd produces kitchen fittings and furniture according to customers' specific requirements. Explain how De Lux Ltd can use a job costing system in order to prepare quotations for customers' requests.
6. Azor Ltd maintains a sophisticated inventory control system. The system is computerised and enables the stores manager to enquire about the inventory levels of each and every stock item. Identify FOUR stock levels that would be useful to keep track of, and provide the main reason for tracking each of these four levels.
7. Louis and Jerry are two accountants working with the same company. Louis is a financial accountant and Jerry is a cost management accountant. Explain the main difference between their job responsibilities and mention TWO duties specific to their respective roles.
(Total: $\mathbf{2 0}$ marks)

## SECTION B

## Answer Question 8 in this section. This question is compulsory and carries $\mathbf{3 0}$ marks.

8. Play Ltd operates a wholesale toy outlet. Due to the pandemic and increased competition from online stores, Play Ltd reported a net trading loss for the year ended 31 December 2021. The directors want to implement tighter controls over cash resources during the year 2022 and the following forecast has been provided.
a) Projected statement of financial position as at 30 June 2022:

| Non-Current assets | c | $\underset{50,200}{\boldsymbol{\epsilon}}$ |
| :---: | :---: | :---: |
| Current assets: |  |  |
| Inventory | 20,600 |  |
| Trade receivables | 60,800 |  |
|  |  | 81,400 |
|  |  | 131,600 |
| Share capital | 2,000 |  |
| Retained earnings | 65,000 |  |
| Current liabilities: |  | 67,000 |
| Trade creditors | 61,950 |  |
| Bank overdraft | 2,650 |  |
|  |  | 64,600 |
|  |  | 131,600 |

b) Sales, at a uniform gross profit mark-up of $25 \%$, are budgeted as follows:

|  | C |
| :--- | :---: |
| July | 30,000 |
| August | 22,500 |
| September | 40,700 |
| October | 32,040 |
| November | 39,000 |
| December | 45,000 |

c) $30 \%$ of the sales are on a cash basis. $20 \%$ of the credit sales are paid in the month of sale, $30 \%$ during the month after the sale and the remainder during the following month. These credit terms have been applied since the beginning of 2022. Trade receivables shown in the forecasted Statement of Financial Position relate to credit sales for the months of May $(€ 27,600)$ and June $(€ 33,200) 2022$.
d) The board of directors propose inventory levels at the end of each month to cover $30 \%$ of the sales projected for the following month in order to better manage the company's cashflow.
e) Inventory as at 30 June 2022 includes slightly damaged stock which was bought for €6,000 Ongoing negotiations indicate that this will be sold for cash during September 2022 for $€ 4,000$. The said transaction is excluded from the budgeted sales figures provided in part (b) above.
f) Play Ltd purchases all goods on credit. 20\% of the purchases are settled one month after the purchase takes place, and the remainder is settled two months after purchase. These credit terms have been applicable since the beginning of the year. The amount of $€ 61,950$ shown as trade creditors in the forecasted Statement of Financial Position above is in relation to the months of May $(€ 20,500)$ and June $(€ 41,450) 2022$.
g) Rent, payable in advance, is due on the first day of each month. The annual rental for the company's premises is $€ 18,000$. All other expenses are settled in the month in which they are incurred, as follows:

|  | July | August | September |
| :--- | :---: | :---: | :---: |
| Salaries and wages | 5,600 | 5,600 | 5,800 |
| Other expenses | 2,200 | 2,400 | 2,800 |

h) The directors are also proposing to dispose of furniture and fittings for $€ 7,000$. The sale will take place during the month of August 2022. The furniture and fittings were bought for $€ 18,000$ and depreciation to date of disposal is $€ 8,000$. The company's annual depreciation charge on the remaining non-current assets is estimated at $€ 5,000$. A full year's depreciation is calculated in year of acquisition, and none in the year of disposal.

## Required:

A. Prepare a detailed monthly cash budget for the 3 months ending 30 September 2022 for Play Ltd.
B. Draft a projected Profit or Loss Statement for the 3 months ending 30 September 2022 and a Statement of Financial Position as at that date.

Please turn the page.

## SECTION C

## Answer any TWO questions from this section. Each question carries $\mathbf{2 5}$ marks.

9. Thomas Calleja imports electronic gadgets and stores them in a central warehouse. The products are then sold to a number of shops around Malta and Gozo. Thomas has asked you, as his accountant, to prepare his management accounts for the month of February. The following information was provided regarding one type of gadget.

On 1 February, 300 units were held in inventory at the central warehouse at a total value of $€ 72,900$. Inventory movements during the month of February were as follows:

|  | Units | Purchase Price per unit | Insurance Costs (Total) |
| :--- | :---: | :---: | :---: |
|  |  | C | $\mathbf{C}$ |
| February 4 | 400 | 200 | 1,600 |
| February 10 | 340 | 205 | 1,020 |
| February 16 | 190 | 205 | 950 |
| February 22 | 320 | 210 | 1,280 |

The cost of freight to import the products is $20 \%$ on the purchase price. A handling cost of $€ 1$ per unit is also incurred on each unit to transfer the product purchased to the central warehouse.

Sales in units during the month of February were as follows:

|  | Units |
| :--- | :---: |
| February 9 | 380 |
| February 11 | 370 |
| February 20 | 220 |
| February 26 | 290 |

During the month of February all products were sold at a selling price of $€ 440$ per unit.

Total selling and administrative overheads for the month of February amounted to $€ 37,500$.

## Required:

A. Calculate the value of closing inventory as at 28 February 2022 using the following methods of valuation on a perpetual basis:
i. First in First Out - FIFO; and
ii. Weighted Average Cost - AVCO.
(Answers should be given to the nearest two decimal places and workings are to be clearly shown).
B. Calculate the value of closing inventory as at 28 February 2022 using the following methods of valuation on a periodic (monthly) basis:
i. First in First Out - FIFO; and
ii. Weighted Average Cost - AVCO.
(Answers should be given to the nearest two decimal places and workings are to be clearly shown).
C. Calculate the profit made by Thomas Calleja for the month of February under FIFO and AVCO using the perpetual method of inventory valuation.
D. Briefly explain why profit differs in each method of inventory valuation using the calculations obtained in (C).
10. Memories Limited manufactures four types of trophies. These are the Gold trophy, the Silver trophy, the Bronze trophy and the Classic trophy.

The variable production costs per unit for the coming financial year are as follows:

| Product | Gold | Silver | Bronze | Classic |
| :--- | :---: | :---: | :---: | :---: |
| Direct Materials | C | C | $\mathbf{C}$ | C |
| Direct Labour | 12 | 3 | 4 | 10 |
| Variable Overheads | 14 | 12 | 8 | 16 |
|  | 7 | 6 | 4 | 8 |

The expected product sales in units and selling prices per unit for the coming financial year are as follows:

| Product | Gold | Silver | Bronze | Classic |
| :--- | :---: | :---: | :---: | :---: |
| Sales - units | 4,000 | 15,000 | 7,500 | 6,200 |
| Selling price per unit $-€$ | 76 | 40 | 30 | 50 |

General fixed costs per annum amount to $€ 75,000$. Furthermore, each product is expected to incur the following specific fixed costs for the coming financial year:

| Product | Gold | Silver | Bronze | Classic |
| :--- | :---: | :---: | :---: | :---: |
|  | $\boldsymbol{\epsilon}$ | $\boldsymbol{\epsilon}$ | $\boldsymbol{\epsilon}$ | $\boldsymbol{\epsilon}$ |
| Fixed Costs | 6,000 | 5,100 | 4,100 | 7,200 |

Trophies Limited is a company manufacturing similar products as Memories Limited and it is offering to produce identical trophies to the ones produced by Memories Limited. The following prices were quoted by Trophies Limited for the supply of all the four products:
Products
Quoted price per unit

| Gold | Silver |
| :---: | :---: |
| $\mathbf{C}$ | $\boldsymbol{C}$ |
| 40 | 22 |

Bronze
C
14

Classic
c
35

## Required:

A. Identify which trophies Memories Limited should continue to manufacture and the trophies the company should buy ready-made. Show all your workings.
B. Prepare profit statements for the coming financial year for the following TWO scenarios:
i) Memories Limited manufactures all of its four products;
ii) Memories Limited accepts your advice in (A) above.
C. Trophies Limited is willing to offer a discount of $4 \%$ on all products should Memories Limited buy all the four products from it. Prepare a profit statement should Memories Limited accept this offer, clearly showing if it is beneficial to accept this offer or not.
D. Briefly discuss any considerations and implications the management of Memories Limited must keep in mind when deciding whether to make or buy a product.
(Total: 25 marks)
Please turn the page.
11. Expert Limited produces Product Zeta. The directors of Expert Limited provide you with the following budget information for the year 2022:

| Number of items produced and sold | 250 items |
| :--- | ---: |
| Selling price per Product Zeta | $\mathbf{C}$ |
| Prime Cost per unit | 600 |
| Total Factory Indirect costs | 7,500 |
| Total Selling and marketing costs: | 2,500 |
| $\quad$ Variable | 2,800 |
| $\quad$ Fixed | 4,200 |

Variable selling and marketing costs include a commission of $2.5 \%$ of the sales value.

The following information relates to the total factory indirect costs of Product Zeta at different output levels in 2021:

| Output (units) | Total cost $\subset$ |
| :---: | :---: |
| 200 | 7,000 |
| 300 | 8,000 |
| 400 | 9,000 |

## Required:

A. Calculate the total variable cost per Product Zeta and the total fixed costs.
B. Calculate the contribution per item and the contribution/sales (C/S) ratio.
C. Draw a break-even chart (graph).
D. From the break-even chart in (C), measure the break-even point and margin of safety in sales value, and the profit for the year.
E. Prepare separate statements showing the profit:
i. If unit selling price is decreased by $20 \%$, thereby increasing sales volume by $30 \%$ of budget level; and
ii. If unit selling price is increased by $10 \%$, resulting in a decrease in sales volume of $30 \%$ of budget level.
F. Describe TWO benefits associated with break-even analysis.
(Total: 25 marks)
12. Perfection Limited is a company manufacturing a beauty product named 'Wonder'. The product is manufactured in three processes. The output of Process 1 becomes the input of Process 2; the output of Process 2 becomes the input of Process 3; and the output of Process 3 is transferred to stores as finished goods.

The following information is available for the month of March 2022:

| Process | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| :--- | ---: | ---: | ---: |
| Direct material (35,000 units) $-€$ | 24,500 | - | - |
| Direct labour $-€$ | 18,000 | 20,000 | 12,000 |
| Direct expenses $-€$ | 7,595 | 3,470 | 2,688 |
| Actual output - units | 34,000 | 32,000 | 30,700 |
| Normal loss $-\%$ of input | $5 \%$ | $5 \%$ | $2 \%$ |
| Scrap value of loss per unit $-€$ | 0.50 | 0.50 | 0.25 |

Production overheads for the month of March 2022 amounted to $€ 48,000$. These are absorbed as a percentage of direct labour costs.

There was no opening or closing inventory or work in progress in any process.

## Required:

A. Prepare Process Accounts for each process.
B. Prepare the Normal Loss Account, the Abnormal Loss Account and the Abnormal Gain Account.
C. Briefly explain the difference between job costing and process costing, and identify TWO industries that use job costing and TWO industries that use process costing.

