



**CERTIFIED PUBLIC ACCOUNTANT
TECHNICAL LEVEL EXAMINATIONS
MA1.2: MANAGEMENT ACCOUNTING
MARKING GUIDE AND MODEL ANSWERS**

SECTION A

Marking Guide

QN	Answer	QN	Answer
1	A	26	B
2	A	27	D
3	B	28	A
4	D	29	C
5	A	30	C
6	D	31	B
7	A	32	D
8	A	33	A
9	C	34	B
10	D	35	D
11	D	36	A
12	C	37	B
13	C	38	A
14	C	39	B
15	C	40	C
16	B	41	C
17	C	42	C
18	D	43	D
19	B	44	B
20	A	45	A
21	D	46	A
22	B	47	D
23	C	48	B
24	C	49	A
25	D	50	A

Model Answers

QUESTION ONE

- Correct answer is A
- Variable costs per unit: $2,000,000 + 1,500,000 = 3,500,000$
- Selling price less variable costs: $16,000,000 - 3,500,000 = 12,500,000$

Why the other options are wrong:

- B, FRW 4.5 million: This distractor arrived at by mistakenly using only the labour cost figure directly as if it were a per-unit answer.
- C, FRW 16 million: This is simply the selling price per unit, with no cost deducted at all. A candidate choosing this has confused "contribution" with "selling price," forgetting that contribution requires subtracting variable costs.
- D, FRW 10 million: This results from taking total variable costs ($\text{FRW } 6,000\text{m} + \text{FRW } 4,500\text{m} = \text{FRW } 10,500\text{m}$, rounded as $\text{FRW } 10,000\text{m}$) and treating it as a per-unit figure without dividing by the 3,000 units produced

QUESTION TWO

- Correct answer is A
- Correct description: 'Primary data is data that has been collected especially for a specific purpose'

Why the other options are wrong:

- B, "can only take on a finite or countable number of values within a given range": This is a description of discrete data, a classification relating to the nature of the values a variable can take, not to the source of the data. It has nothing to do with whether data is primary or secondary.
- C, "data that cannot be measured": This describes qualitative (categorical) data in a loose/incorrect sense (even qualitative data can often be categorized or coded). This confuses a data-type classification (qualitative vs quantitative) with the primary/secondary classification, and is not an accurate definition of primary data.
- D, "can be measured rather than counted, and can take on any value": This describes continuous data, another data-type classification based on measurement characteristics, not on how or by whom the data was collected. Like B, it wrongly conflates the primary/secondary distinction with the discrete/continuous distinction.

QUESTION THREE

- Correct answer is B
- A $\text{FRW } 13,400\text{M}$ is wrong, it is a summation of Selling and distribution, Direct materials, Factory rent and rates, Direct wages and Special tooling costs (see a note below)
- C $\text{FRW } 11,000\text{M}$ is not correct, it includes factory rent and rates into prime costs and the part of special tooling used for general workshop maintenance contract.
- D $\text{FRW } 9,200\text{M}$ is not correct: it includes the part of special tooling used for general workshop maintenance contract into prime costs.

QUESTION FOUR

- Correct answer is D
- Correct materials purchase budget: $20 + 164 - 32 = 152$
- A is not correct: 200M ($32M + 24M + 164M - 20$)
- B is not correct: 128M ($164 + 20 - 24 - 32$)
- C is not correct: 176M ($32 + 164 - 20$)

QUESTION FIVE

Correct Answer is A: Maturity stage

The product life cycle consists of four recognized stages: Introduction, Growth, Maturity, and Decline. In Year 4, sales growth for Product TXLA slowed down and monthly sales became constant (flattened out) in the final quarter. This flattening, where sales stabilize after a period of rising demand, rather than continuing to rise sharply or starting to fall, is the defining characteristic of the Maturity stage. At this point, the product has reached market saturation: most potential customers who will buy it already have, and sales level off rather than continuing the steep upward trend seen during Growth.

Why the other options are wrong:

- B, Growth stage: This was the stage Zebra was in during Years 1 to 3, when sales were actively increasing. By Year 4, growth is slowing and sales are becoming constant, this is no longer Growth, but the transition into Maturity. Choosing this option confuses the earlier trend with the current one described in the question.
- C, Maintenance stage: This is not a recognized stage in the standard product life cycle model. It's a distractor term that sounds plausible (since sales are "being maintained" at a constant level) but does not correspond to any accepted stage in the PLC framework tested in management accounting/marketing syllabi.
- D, Final stage: This is a vague, non-technical term not used in the standard PLC model. If it's meant to imply the last stage (Decline), that would be incorrect too, since Decline is characterized by *falling* sales, not sales that have merely levelled off. Constant sales after a growth slowdown signals Maturity, not Decline.

QUESTION SIX

Correct Answer is D: 384,000 kg

- A (307,200): Student divides material cost by FRW 100 instead of FRW 80 to derive kg per unit.
- B (320,000): Student confuses available materials (the supply figure) with total materials required.
- C (360,000): Student uses labour cost instead of material cost to derive kg, dividing by FRW 80.

QUESTION SEVEN

- Correct Answer is A: Materials
- Compute total resources required at full demand for both inputs:
- Materials required:
 $(8,000 \times 12) + (15,000 \times 10) + (10,000 \times 9) + (6,000 \times 8) = 96,000 + 150,000 + 90,000 + 48,000 = 384,000 \text{ kg}$
→ Exceeds 320,000 kg available (shortfall: 64,000 kg)
- Labour hours required:
 $(8,000 \times 8) + (15,000 \times 10) + (10,000 \times 7) + (6,000 \times 12) = 64,000 + 150,000 + 70,000 + 72,000 = 356,000 \text{ hrs}$
→ Within 420,000 hrs available (surplus: 64,000 hrs)
- Materials is the only scarce resource; it is the binding limiting factor. Labour is not a constraint.
- B: Student correctly computes labour hours (356,000) but incorrectly compares it to available hours (420,000) and picks labour as the binding constraint, ignoring that materials is actually scarce.
- C: Student notes that both inputs need to be checked and incorrectly concludes both are limiting factors without completing the comparison.

- D: Student uses the demand unit totals (39,000 units) and compares them directly to resource figures without computing the actual resource requirements.

QUESTION EIGHT

Products must be ranked by contribution per kilogram of material (the limiting factor), not by contribution per unit or per labour hour:

Product	Contribution/unit	Material kg/unit	Contribution/kg	Rank
CC	1,380	9	153.3	1st
AA	1,260	12	105.0	2nd
DD	800	8	100.0	3rd
BB	940	10	94.0	4th

Correct Answer is A: CC, AA, DD, BB

- B (CC, AA, BB, DD): Student ranks by contribution per labour hour (CC=197.1, AA=157.5, BB=94.0, DD=66.7) instead of per kg of material, the wrong limiting factor denominator.
- C (AA, CC, DD, BB): Student ranks by contribution per unit (CC=1,380, AA=1,260, DD=800, BB=940) but incorrectly reads AA as highest. Actual cont/unit rank is CC, AA, BB, DD.
- D (CC, DD, AA, BB): Student correctly identifies material as the limiting factor and computes cont/kg for CC and DD accurately, but makes an arithmetic error swapping AA (105.0) and DD (100.0).

QUESTION NINE

Following the priority ranking (CC → AA → DD → BB), allocate the 320,000 available kg of material:

* Remaining kg after CC, AA, DD = 320,000 – 90,000 – 96,000 – 48,000 = 86,000 kg → BB: 86,000 ÷ 10 = 8,600 units (below full demand of 15,000)

Product	Units	kg/unit	kg used	Contribution (FRW)
CC (full)	10,000	9	90,000	13,800,000
AA (full)	8,000	12	96,000	10,080,000
DD (full)	6,000	8	48,000	4,800,000
BB (balance*)	8,600	10	86,000	8,084,000
TOTAL MAXIMUM CONTRIBUTION			320,000 kg	FRW 36,764,000

Correct Answer is C: FRW 36,764,000

- A (34,884,000): Student uses 300,000 kg instead of 320,000 kg available (misreads the supply figure), producing fewer units of BB as the balancing product.
- B (36,476,000): Student ranks correctly by contribution per kg but makes an arithmetic error in the remaining kg for BB, arriving at a slightly lower allocation.
- D (42,780,000): Student ignores the material constraint entirely and multiplies full demand by contribution per unit for all four products.

QUESTION TEN

Work backwards from the material price variance (MPV) to find the standard price, then use the material usage variance (MUV) to find the standard quantity for actual output:

Step	Value
Actual material price = FRW 42,000,000 ÷ 60,000 kg	FRW 700 per kg
MPV = (Std price – Actual price) × Actual qty → -3,000,000 = (SP – 700) × 60,000	Std price = FRW 650/kg
MUV = (Std qty for actual output – Actual qty) × Std price → 3,900,000 = (Std qty – 60,000) × 650	Std qty = 66,000 kg
Std qty per unit = 66,000 ÷ 22,000 actual units	3 kg per unit

Correct Answer is D: 3 kg per unit

- A (2.00 kg): Student divides actual quantity (60,000 kg) by budgeted units (30,000) instead of working through the variances, ignores the fact that actual output was only 22,000 units.
- B (2.73 kg): Student divides actual quantity (60,000 kg) by actual production units (22,000), uses actual inputs without any variance adjustment.
- C (2.98 kg): Student correctly sets up the MUV formula but uses the actual material price (FRW 700) instead of the derived standard price (FRW 650) as the denominator, giving a slightly lower standard quantity.

QUESTION 11

Work backwards from the labour rate variance (LRV) to find the standard rate, then use the labour efficiency variance (LEV) to find the standard hours for actual output:

Step	Value
Actual labour rate = FRW 36,000,000 ÷ 45,000 hrs	FRW 800 per hr
LRV = (Std rate – Actual rate) × Actual hrs → -1,350,000 = (SR – 800) × 45,000	Std rate = FRW 770/hr
LEV = (Std hrs for actual output – Actual hrs) × Std rate → 3,465,000 = (Std hrs – 45,000) × 770	Std hrs = 49,500
Std hrs per unit = 49,500 ÷ 22,000 actual units	2.25 hrs per unit

Correct Answer is D: 2.25 hours per unit

- A (1.50 hrs): Student divides actual hours (45,000) by budgeted units (30,000), confuses budgeted output with actual output and ignores the efficiency variance entirely.
- B (2.05 hrs): Student divides actual hours (45,000) by actual production units (22,000), uses raw actual data without working through the LEV formula.
- C (2.24 hrs): Student correctly sets up the LEV formula but uses the actual labour rate (FRW 800) instead of the derived standard rate (FRW 770), giving a slightly understated standard hours' figure.

QUESTION 12

Use the variable overhead expenditure variance to recover the budgeted VOH for actual hours worked, then divide by actual hours to get the absorption rate:

Step	Value
VOH Expenditure variance = Budgeted VOH for actual hrs – Actual VOH	
2,250,000 = Budgeted VOH for actual hrs – 31,500,000	Budgeted VOH = 33,750,000
VOH absorption rate = FRW 33,750,000 ÷ 45,000 actual hrs	
Verify: VOH Eff variance = (49,500 – 45,000) × 750 = 3,375,000 ✓	FRW 750 per hr

Correct Answer is C: FRW 750 per hour

- A (FRW 636): Student divides actual VOH (FRW 31,500,000) by standard hours for actual output (49,500 hrs) instead of actual hours, an incorrect combination of actual cost with a standard hours denominator.
- B (FRW 700): Student divides actual VOH expenditure (FRW 31,500,000) by actual hours (45,000), ignores the expenditure variance entirely and treats actual cost as the budgeted rate.
- D (FRW 775): Student adds the VOH efficiency variance (FRW 3,375,000) to the actual VOH instead of the expenditure variance (FRW 2,250,000), inflating the budgeted VOH before dividing by actual hours.

QUESTION 13

The fixed overhead expenditure variance measures the difference between budgeted and actual fixed overhead. Since the variance is Favourable, actual FOH was less than budgeted FOH:

Step	Value
FOH Expenditure variance = Budgeted FOH – Actual FOH	
3,000,000 (F) = Budgeted FOH – 27,000,000	
Budgeted FOH = FRW 27,000,000 + FRW 3,000,000	FRW 30,000,000

Correct Answer is C: FRW 30,000,000

- A (FRW 24,000,000): Student subtracts the favourable variance from actual FOH instead of adding it, reverses the direction of the variance calculation.
- B (FRW 27,000,000): Student reads the actual FOH figure directly from the data and treats it as the budgeted figure, ignores the expenditure variance entirely.
- D (FRW 36,818,182): Student multiplies actual FOH per unit (FRW 27,000,000 ÷ 22,000) by budgeted units (30,000), confuses actual cost rates with budgeted amounts.

QUESTION 14

Combine all standard cost elements derived in Questions 1 to 4, using standard quantities and standard rates throughout:

Cost element	Qty/hrs	Rate (FRW)	Amount (FRW)
Direct material	3 kg	650	1,950
Direct labour	2.25 hrs	770	1,732.50
Variable overhead	2.25 hrs	750	1,687.50
Fixed overhead	1 unit	1,000	1,0000
STANDARD COST PER UNIT			6,370

FOH per unit = Budgeted FOH ÷ Budgeted units = FRW 30,000,000 ÷ 30,000 = FRW 1,000 per unit

- Correct Answer is C: FRW 6,370
- A (FRW 5,370): Student correctly calculates material, labour and variable overhead at standard rates but omits the fixed overhead absorption entirely, a common error when students focus only on variable costs.
- B (FRW 6,205): Student uses actual rates and actual quantities throughout instead of standard rates, computes actual cost per unit rather than standard cost per unit.
- D (FRW 6,734): Student uses the correct standard rates for material, labour and variable overhead but divides budgeted FOH (FRW 30,000,000) by actual production (22,000 units) instead of budgeted units (30,000), overstating the FOH per unit to FRW 1,364.

QUESTION 15

Correct answer is C: comprehensive plan made up of detailed subsidiary budgets

- Capital budget: long-term investment planning
- Flexed budget: adjusted for actual activity levels
- Profiled budget: spread over time (e.g., monthly)

QUESTION 16

Correct Answer is B: FRW 135 million

Administrative overheads are costs associated with the general management and administration of the business, not directly tied to production, distribution, or selling activities. From the list given, the items that qualify as administrative overheads are:

- Depreciation for office building: FRW 80 million
- Stationery, postage and telephone: FRW 23 million
- Sundry expenses: FRW 32 million

Total = 80 + 23 + 32 = FRW 135 million

Why the other options are wrong:

- A FRW 173 million: Wrongly including Sales commission (38m) instead of excluding it: 80+23+32+38 = 173. This reflects a failure to recognize that sales commission is a selling/distribution overhead, not an administrative cost.
- C FRW 211 million: This total likely stems from including both Carriage inwards and Sales commission alongside the three genuine administrative items (80+23+32+21+38 = 194).
- D FRW 91 million: This come from a total of Carriage inwards, Sundry expenses and sales commission (21+32+38=91M)

QUESTION 17

Correct Answer is C: FRW 33 million

Reasoning:

Cash collected in December comes from three months of sales, based on the payment pattern:

- 25% of December sales (current month)
- 50% of November sales (month following the sale)
- 25% of October sales (two months after the sale)

Calculation:

- 25% × FRW 24m (December) = FRW 6 million
- 50% × FRW 34m (November) = FRW 17 million
- 25% × FRW 40m (October) = FRW 10 million

Total December cash receipts = 6 + 17 + 10 = FRW 33 million

Why the other options are wrong:

- A FRW 38 million: This likely results from misapplying the percentages to the wrong months
- B FRW 24 million: This is simply December's sales figure taken at face value (100%), ignoring the collection pattern entirely, as if all December sales were collected in cash within the same month. This ignores the credit sales terms given in the question entirely.
- D FRW 37 million: This likely arises from a one-month shift in the lag structure. e.g., mistakenly applying 25% to November (as if it were the "current month") and 50% to October, and 25% to September: $0.25 \times 34 + 0.50 \times 40 + 0.25 \times 36 = 8.5 + 20 + 9 = 37.5 \approx 37$. This reflects a common error of misaligning which month's sales correspond to which collection percentage

QUESTION 18

Correct Answer is D: FRW 900 million

Calculate labour cost per unit in each department, then multiply by total production.

- Department 1: 1.5 hours $\times$ FRW 5,000 per hour = FRW 7,500 per unit
- Department 2: 2.5 hours $\times$ FRW 6,000 per hour = FRW 15,000 per unit
- Total labour cost per unit = FRW 7,500 + FRW 15,000 = FRW 22,500 per unit

Total labour cost budget = FRW 22,500 $\times$ 40,000 units = FRW 900,000,000 = FRW 900 million

Why the other options are wrong:

- A FRW 860 million: This results from a minor arithmetic slip in one of the department calculations, for example, using 1.5 hours $\times$ 5,000 = 7,500 correctly but miscalculating Department 2 as 2.5 $\times$ 6,000 incorrectly (perhaps as 14,000 instead of 15,000), giving 21,500/unit $\times$ 40,000 = 860 million.
- B FRW 600 million: This arises from using only one department's cost. e.g., calculating only Department 2's cost (2.5 $\times$ 6,000 = 15,000/unit $\times$ 40,000 = 600 million) and forgetting to add Department 1's labour cost entirely.
- C FRW 960 million: This could result from swapping the hourly rates between departments

QUESTION 19

Correct Answer is B: A profiled budget shows how the total annual budget will be split between shorter periods

A profiled budget takes an annual budget total and spreads (profiles) it across shorter time periods, typically months or quarters, often in a way that reflects seasonal patterns or expected variations in activity throughout the year, rather than simply dividing the annual figure equally (e.g., $\div 12$). This allows an organization to compare actual performance against a more realistic period-by-period target, rather than a flat, evenly-spread budget.

Why the other options are wrong:

- A "shows the cash amounts related to budget lines from the statement of profit or loss": This describes something closer to a cash budget or a reconciliation between accrual-based P&L items and cash flow, not a profiled budget. Profiling is about the timing/period split of a budget, not about converting P&L items into cash terms.
- C "shows the annual budget, adjusted for inflation": This describes an inflation-adjusted (or indexed) budget, which is a distinct budgeting concept dealing with price-level changes over time, not with splitting an annual total across shorter periods. Profiling and inflation-adjustment are two separate budgeting techniques.
- D "shows the requirements for materials, labour, and other direct costs": This describes a functional budget (such as a materials budget or labour budget), which breaks the total budget down by type

of resource/cost, not by time period. This confuses profiling (a time-based split) with functional budgeting (a resource-based split).

QUESTION 20

Correct Answer is A: 117,600

Since 1 machine is unavailable on average due to breakdown or maintenance, only 7 machines are effectively available for production at any given time ($8 - 1 = 7$).

Maximum annual production = Effective machines $\times$ Units per machine per week $\times$ Number of weeks
 $= 7 \times 350 \times 48$
 $= 2,450 \times 48$
 $= 117,600$ units

Why the other options are wrong:

- C 134,400: This results from using all 8 machines ($8 \times 350 \times 48 = 134,400$) without deducting the machine that is, on average, unavailable due to breakdown or maintenance. This is the most common conceptual error, ignoring the stated capacity loss entirely and treating the factory as running at full machine capacity all year.
- D 140,000: This likely results from using the full 8 machines but with a different assumed number of weeks. e.g., $8 \times 350 \times 50 = 140,000$. Mistakenly using 50 operating weeks instead of the 48 weeks stated, in addition to ignoring the unavailable machine.
- B 127,400: This falls between the correct answer and the "no breakdown adjustment" answer, suggesting a partial or incorrect adjustment for example, deducting the equivalent of a fraction of a machine's output rather than a full machine

QUESTION 21

Correct Answer is D: An unexpected pay increase for employees

The labour rate variance measures the difference between the actual rate paid per hour of labour and the standard (budgeted) rate per hour, applied to the actual hours worked. It is purely about the price/rate paid for labour, not about efficiency or quantity of hours used.

An unexpected pay increase means the actual hourly rate paid to employees is higher than the standard rate budgeted for — directly causing an unfavourable (adverse) labour rate variance, since the company is paying more per hour than planned.

Why the other options are wrong:

- A Use of a lower grade of labour than anticipated: Using a lower (cheaper) grade of labour than planned would typically mean paying a lower rate than standard. This would cause a favourable rate variance, not unfavourable. (It might also cause other issues, like an unfavourable efficiency/productivity variance if the lower-skilled labour takes longer, but that's a separate variance.)
- B More idle time than budgeted: Idle time relates to hours paid for but not actively worked on production. This affects the labour efficiency variance (specifically, it's often analyzed separately as an idle time variance), not the rate variance. Idle time is about the quantity/utilization of hours, not the price paid per hour.
- C Unexpectedly low levels of overtime: Lower-than-expected overtime would generally reduce labour costs (since overtime is typically paid at a premium rate), which would tend to produce a favourable variance if anything and more precisely, overtime premium is often treated as a separate cost element or folded into the rate calculation, but "low overtime" points toward cost savings, not excess cost, so it does not explain an unfavourable rate variance.

QUESTION 22

Correct Answer is B: Arrange training for production staff

An unfavourable labour hours variance (i.e., an adverse labour efficiency variance) means workers are taking more actual hours to complete production than the standard hours allowed, indicating a productivity or skill-related problem. Arranging training for production staff directly addresses the root cause by improving workers' skills, speed, and competence, which should reduce the actual hours needed to complete tasks and bring performance back in line with (or better than) the standard, correcting the unfavourable variance going forward.

Why the other options are wrong:

- A Purchase new machinery: While new machinery might eventually improve efficiency, this is a capital investment decision with long lead times, high cost, and no guarantee of directly resolving a labour efficiency problem. It doesn't address the underlying cause (staff taking too long) and isn't a direct or immediate management response to a labour hours variance, it may even be irrelevant if the issue is skill-related rather than equipment-related.
- C Cancel all overtime: Cancelling overtime addresses labour cost/rate concerns (reducing overtime premium expense) but does not address why staff are taking more hours than standard to complete the work. In fact, if work still needs to be done and overtime is cancelled without addressing the efficiency issue, this could worsen delays or force other costly adjustments, it doesn't tackle the root cause of the inefficiency.
- D Announce redundancies of production staff: Reducing headcount does not fix an efficiency problem, if anything, it could worsen the variance in the short term (remaining staff may be overworked, morale may drop, and output may fall further behind standard). This is a drastic, cost-cutting action unrelated to correcting why tasks are taking longer than expected, and does not address a skills/productivity gap.

QUESTION 23

Correct Answer is C: 35.0%

Gross profit margin = $\text{Gross profit} \div \text{Revenue} \times 100 = \text{FRW } 168,000,000 \div \text{FRW } 480,000,000 \times 100 = 35.0\%$

Why the other options are wrong:

- A 10.3%: This is the net profit margin ($\text{Profit after tax} \div \text{Revenue} = 49.2\text{m} \div 480\text{m} = 10.25\% \approx 10.3\%$), not the gross profit margin. Candidates who select this have used the bottom-line profit figure instead of gross profit.
- B 20.0%: This is the operating profit margin ($\text{EBIT} \div \text{Revenue} = 96\text{m} \div 480\text{m} = 20.0\%$), not gross profit margin. This confuses gross profit (before operating expenses) with operating profit (after operating expenses).
- D 285.7%: This results from inverting the ratio, $\text{Revenue} \div \text{Cost of sales} (480\text{m} \div 168\text{m} = 285.7\%)$ rather than correctly computing $\text{Gross profit} \div \text{Revenue}$

QUESTION 24

Correct Answer is C: 22.33%

ROCE = $\text{EBIT (Operating profit)} \div \text{Capital employed} \times 100$, where $\text{Capital employed} = \text{Equity} + \text{Long-term borrowings} = \text{FRW } 250,000,000 + \text{FRW } 180,000,000 = \text{FRW } 430,000,000$.

ROCE = $96,000,000 \div 430,000,000 \times 100 = 22.33\%$

Why the other options are wrong:

- A 11.44%: This uses Profit after tax instead of EBIT in the numerator ($49.2\text{m} \div 430\text{m} = 11.44\%$). ROCE must use operating profit (EBIT), not the after-interest, after-tax profit figure, since capital employed represents financing before interest and tax effects.
- B 19.20%: This uses Total assets instead of capital employed in the denominator ($96\text{m} \div 500\text{m} = 19.2\%$). This confuses ROCE with a return-on-total-assets measure, ignoring that capital employed excludes current liabilities.
- D 38.40%: This uses Equity only (excluding long-term borrowings) as the denominator ($96\text{m} \div 250\text{m} = 38.4\%$). This omits long-term debt from capital employed, understating the capital base the return should be measured against.

QUESTION 25

Correct Answer is D: 2.00:1

Current ratio = Current assets $\div$ Current liabilities = $(52\text{m} + 64\text{m} + 24\text{m}) \div (48\text{m} + 22\text{m}) = 140,000,000 \div 70,000,000 = 2.00:1$

Why the other options are wrong:

- A 0.50:1: This inverts the ratio, Current liabilities $\div$ Current assets ($70\text{m} \div 140\text{m} = 0.5$) — instead of assets over liabilities.
- B 0.56:1: This results from dividing current assets by total liabilities (current liabilities + long-term borrowings = $70\text{m} + 180\text{m} = 250\text{m}$): $140\text{m} \div 250\text{m} = 0.56$. This incorrectly includes long-term borrowings in the denominator.
- C 1.26:1: This is actually the quick (acid-test) ratio, (Current assets – Inventories) $\div$ Current liabilities = $(140\text{m} - 52\text{m}) \div 70\text{m} = 88\text{m} \div 70\text{m} = 1.26$. This is a valid liquidity ratio, but it is not the current ratio asked for, since it excludes inventories.

QUESTION 26

Correct Answer is B: 48.7 days

Trade receivables collection period = (Trade receivables $\div$ Revenue) $\times$ 365 = $(64,000,000 \div 480,000,000) \times 365 = 48.7$ days

Why the other options are wrong:

- A 48.0 days: This results from using a 360-day year instead of the 365 days specified in the question's instructions ($64\text{m} \div 480\text{m} \times 360 = 48.0$).
- C 74.9 days: This uses Cost of sales instead of Revenue in the denominator ($64\text{m} \div 312\text{m} \times 365 = 74.9$). This confuses the receivables collection period (based on sales/revenue) with a payables-style calculation (which is based on cost of sales/purchases).
- D 106.5 days: This uses Total current assets instead of Trade receivables alone in the numerator ($140\text{m} \div 480\text{m} \times 365 = 106.5$). This fails to isolate the receivables figure from other current assets (inventories and cash).

QUESTION 27

Correct Answer is D: Management accountants may consult information and expertise from other specialists, such as market experts and statisticians

Reasoning:

Management accounting does not operate in isolation. Effective management accounting often draws on knowledge from other functions and specialisms, for example, market/marketing experts (for sales forecasts, pricing, and demand analysis), statisticians (for forecasting techniques, variance analysis, and quantitative modelling), engineers (for cost estimation and process information), and IT specialists (for

systems and data). This collaborative, cross-functional approach reflects real-world practice and is the correct description of the role other professionals play in supporting management accounting.

Why the other options are wrong:

- A "All management accounting activities need to be authorised by external audit experts": This is false. External audit is concerned primarily with providing an independent opinion on the truth and fairness of statutory financial statements for external reporting purposes. Management accounting is an internal, forward-looking discipline (budgeting, planning, decision support, performance measurement) that does not require external audit authorisation, external auditors typically have no authority over, or involvement in, internal management accounting activities at all.
- B "All management accounting activities can be carried out entirely by accounting specialists, without using inputs from other functions or specialisms": This is false and contradicts the collaborative reality of management accounting. Good management accounting relies on inputs from other areas of the business (e.g., production data from operations, demand data from marketing/sales, technical data from engineering), it cannot be done in a vacuum using only accounting expertise.
- C "...may benefit from support from specialists with professional qualifications, but not from experienced staff who do not have a professional qualification": This is false because it arbitrarily excludes valuable input from experienced, non-qualified staff. Practical, on-the-job experience (e.g., from long-serving production staff or line managers) can be just as valuable a source of relevant information and insight as input from formally qualified specialists. Restricting useful input only to those with professional qualifications is an unfounded and overly rigid restriction not reflective of good practice.

QUESTION 28

Correct Answer is A: FRW 120,907 million net cost

The net present value life cycle cost is found by summing all the present values (both outflows and the inflow from sale proceeds):

- Year 0 (Purchase/Running costs): (110,000)
 - Year 1 (Running costs): (10,908)
 - Year 2 (Running costs): (8,260)
 - Year 3 (Running costs): (8,261)
 - Year 3 (Sale proceeds): +16,522
- Sum = (110,000) + (10,908) + (8,260) + (8,261) + 16,522

Step by step:

- $(110,000) + (10,908) = (120,908)$
- $(120,908) + (8,260) = (129,168)$
- $(129,168) + (8,261) = (137,429)$
- $(137,429) + 16,522 = (120,907)$

Net present value life cycle cost = FRW 120,907 million (net cost)

Why the other options are wrong:

- B FRW 137,429 million net cost: This is the subtotal of all the outflows only ($110,000 + 10,908 + 8,260 + 8,261 = 137,429$), before deducting the present value of the sale proceeds (16,522). This reflects forgetting to net off the residual/sale value inflow from the vehicle's disposal at the end of Year 3.
- C FRW 121,000 million net cost: This appears to be a rounded/approximate figure, likely from using the undiscounted purchase cost (110,000) plus a rough approximation of the other cash flows without applying the discount factors correctly, or from a rounding of intermediate figures rather than following the precise discounted cash flow calculation.

- D FRW 153,951 million net cost: This results from treating all five present values as costs to be summed: $110,000 + 10,908 + 8,260 + 8,261 + 16,522 = 153,951$), rather than recognising that sale proceeds reduce net cost since the vehicle is being disposed of for a positive cash receipt.

QUESTION 29

Correct Answer is C: FRW 360 million – Favourable

Reasoning:

Sales price variance = Actual quantity sold $\times$ (Actual selling price – Budgeted selling price)

= 120,000 units $\times$ (FRW 98,000 – FRW 95,000)

= 120,000 units $\times$ FRW 3,000

= FRW 360,000,000 = FRW 360 million

Since the actual selling price (FRW 98,000) exceeded the budgeted selling price (FRW 95,000), the company earned more revenue per unit than planned — this is a Favourable variance.

Why the other options are wrong:

- A FRW 315 million – Adverse: This figure results from applying the price difference to budgeted units instead of actual units ($105,000 \times 3,000 = 315,000,000 = 315$ million), which is the correct approach for a *sales volume* variance calculation basis but not for the *sales price* variance. The sales price variance must be based on the actual quantity sold, since it isolates the effect of price alone, holding the actual volume constant. It is also incorrectly labelled as "Adverse" when the price increase is actually favourable.
- B FRW 315 million – Favourable: This has the correct favourable direction but the wrong figure, again from using budgeted units (105,000) rather than actual units (120,000) in the calculation, an error in identifying which quantity to apply the price variance to.
- D FRW 360 million – Adverse: This has the correct amount but the wrong direction. Since the actual selling price was higher than budgeted, this represents more revenue than planned, which is favourable, not adverse. Labelling it "Adverse" suggests a candidate misunderstood the direction of a price variance

QUESTION 30

Correct Answer is C: FRW 2.0 million unfavourable

Reasoning:

The total labour cost variance = Actual labour cost – Standard labour cost for actual output.

Standard cost per unit = Standard hours $\times$ Standard rate = 3.5 hours $\times$ FRW 4,500 = FRW 15,750 per unit

Standard labour cost for 2,000 units = FRW 15,750 $\times$ 2,000 = FRW 31,500,000 (FRW 31.5 million)

Labour cost variance = Actual cost – Standard cost = FRW 33.5 million – FRW 31.5 million = FRW 2.0 million

Since actual cost exceeds the standard cost, this is an unfavourable (adverse) variance.

Why the other options are wrong:

- A FRW 1.0 million unfavourable: This results from a calculation error in deriving the standard cost
- B FRW 2.5 million unfavourable: This results from a slightly different misapplication, using 3.5 hours $\times$ 4,500 but mistakenly applying it to a different unit count,
- D FRW 2.2 million unfavourable: This result from hour figure being slightly miscalculated.

QUESTION 31

Correct Answer is B: FRW 42.5 million

Under absorption costing, unit cost = Direct materials + Direct labour + Overheads absorbed (based on the absorption rates and hours per unit in each stage).

- Direct materials = FRW 20 million
- Direct labour = FRW 16 million
- Stage 1 overhead absorbed = 3 hours × FRW 1.8 million per hour = FRW 5.4 million
- Stage 2 overhead absorbed = 0.5 hours × FRW 2.2 million per hour = FRW 1.1 million
- Total overhead absorbed = FRW 5.4 million + FRW 1.1 million = FRW 6.5 million

Total unit cost = 20 + 16 + 6.5 = FRW 42.5 million

Why the other options are wrong:

- A FRW 43.6 million: This results from swapping the hours between stages ($0.5 \text{ hours} \times 1.8 = 0.9$, and $3 \text{ hours} \times 2.2 = 6.6$, giving total overhead of 7.5).
- C FRW 40 million: This omits the overhead absorption entirely, using only Direct materials + Direct labour ($20 + 16 = 40$), ignoring the requirement to absorb Stage 1 and Stage 2 overheads into the unit cost under absorption costing, a fundamental omission of a full cost component.
- D FRW 48 million: This likely results from overstating the overhead absorbed, for example, applying the Stage 1 rate to the total combined hours ($3.5 \text{ hours} \times 1.8 = 6.3$) plus Stage 2 again

QUESTION 32

Correct Answer is D: FRW 3.4 million

Reasoning:

Total cost of quality = Appraisal (prevention/inspection) costs + Internal failure costs

- Appraisal cost: Inspection team costs = FRW 0.8 million
- Internal failure cost: This is the loss in revenue from selling substandard units at a reduced price instead of the normal price:
- Loss per unit = Normal price – Reduced price = FRW 5,000 – FRW 1,000 = FRW 4,000 per unit
- Total loss = 650 units × FRW 4,000 = FRW 2,600,000 = FRW 2.6 million

Total cost of quality = FRW 0.8 million + FRW 2.6 million = FRW 3.4 million

Why the other options are wrong:

- A FRW 4.05 million: This results from an incorrect basis for the failure cost, using the full normal selling price (FRW 5,000) as the "loss" per substandard unit rather than the difference between normal and reduced price ($650 \times 5,000 = 3,250,000 = 3.25\text{m} + 0.8\text{m} = 4.05\text{m}$). This wrongly treats the entire revenue from substandard units as lost, rather than just the price reduction/shortfall.
- B FRW 0.8 million: This includes only the appraisal cost (inspection team costs) and completely omits the internal failure cost arising from the substandard units being sold at a reduced price, an incomplete cost of quality calculation that ignores the quality failure cost component entirely.
- C FRW 2.6 million: This includes only the internal failure cost ($650 \times 4,000 = 2.6 \text{ million}$) and omits the appraisal cost (FRW 0.8 million inspection team cost), the opposite omission to option B, capturing only one component of total cost of quality rather than both.

QUESTION 33

Correct Answer is A: FRW 1.18 million

Reasoning:

Present value of a single cash flow = Cash flow $\times$ Discount factor, where the discount factor for Year 3 at 15% = $1 \div (1.15)^3 = 1 \div 1.520875 = 0.6575$ (approximately)

PV of Year 3 cash inflow = FRW 1.8 million $\times$ 0.6575 = FRW 1.18 million (approximately)

Why the other options are wrong:

- B FRW 1.6 million: This results from applying the Year 1 discount factor ($1 \div 1.15 = 0.8696$) instead of the Year 3 factor: $1.8 \times 0.8696 = 1.565 \approx 1.6$ million. This reflects using the wrong year's discount factor, treating the cash flow as if it occurred one year earlier than it actually did.
- C FRW 1.8 million: This is simply the undiscounted cash inflow, with no time value of money adjustment applied at all, as if the discount factor used was 1.000 (i.e., Year 0). This ignores the entire concept of discounting for the time value of money.
- D FRW 1.36 million: This results from applying the Year 2 discount factor ($1 \div 1.15^2 = 0.7561$) instead of Year 3: $1.8 \times 0.7561 = 1.361 \approx 1.36$ million. This reflects a one-year misalignment, using the Year 2 factor for a Year 3 cash flow.

QUESTION 34

Correct Answer is B: Budget reports are compiled using mainly internal data, but budget monitoring may also require some reference to external information

Budget reports are primarily built from internal data, actual results from the organization's own accounting records, cost centers, departmental returns, and management information systems, compared against the internally set budget figures. However, effective budget monitoring often does require reference to relevant external information as well, for example, market prices, inflation rates, competitor activity, exchange rates, or industry benchmarks to help interpret variances and assess whether performance is reasonable given external conditions. This option correctly captures both the primary internal basis of budget reports and the supplementary role external information can play.

Why the other options are wrong:

- A "compiled using formats that are imposed by external regulators": This is false. Budget reports are internal management reports, prepared for internal decision-making and control purposes. Unlike statutory financial statements (which may follow externally imposed formats/standards, such as IFRS, for external reporting), budget reports are not subject to external regulatory formatting requirements, organizations design their own internal budget report formats to suit management's needs.
- C "compiled when there are problems in the organisation, rather than on a regular basis": This is false. Budget reports are typically produced regularly (e.g., monthly, quarterly) as part of the normal ongoing planning and control cycle, regardless of whether problems exist. Regular reporting is what allows problems to be identified early through variance analysis, reporting is not merely reactive or problem-triggered.
- D "compiled using mainly external data, but budget monitoring may also require some reference to internal information": This reverses the correct relationship. Budget reports are based mainly on internal data (the organization's own actual results and budgeted figures), with external data playing only a supplementary role not the other way around.

QUESTION 35

Correct Answer is D: Close the operations in Old Restaurant, as the annual loss of FRW 21 million is greater than the fixed costs that would be transferred

Reasoning:

This is a relevant costing / closure decision question, where the key is to identify which costs are avoidable if Old Restaurant closes, and which are unavoidable (i.e., will simply be reallocated elsewhere).

- Old Restaurant's reported loss = FRW 21 million, which already includes FRW 13 million of central recharges.
- Old Restaurant's result before central recharges = $(21m) + 13m = \text{FRW } 8 \text{ million loss}$, meaning Old Restaurant does not even cover its own direct operating costs, let alone contribute anything toward central fixed costs.
- Of the FRW 13 million in recharges, only FRW 10 million is unavoidable (it would simply be transferred to New and Modern Restaurants if Old closes). The remaining FRW 3 million is avoidable, it disappears entirely if Old closes.

Net effect of closing Old Restaurant:

- Eliminate the FRW 21 million reported loss = +21m
- But FRW 10 million of recharges must now be absorbed by New and Modern = -10m
- Net improvement to overall company profit = +11 million

Since the avoidable loss (FRW 21 million reported loss) exceeds the unavoidable recharge that must be transferred (FRW 10 million), closing Old Restaurant is the financially sound decision, it improves total company profit by FRW 11 million.

Why the other options are wrong:

- A "Maintain operations in Old Restaurant, as these are making a contribution to central fixed costs": This is factually incorrect. Old Restaurant's result *before* any recharge allocation is already a FRW 8 million loss, it is not covering its own operating costs, so it cannot be said to be making any positive contribution toward central fixed costs. This option misapplies the "contribution to fixed costs" argument (which is valid *only* when a division at least covers its own costs and contributes something extra toward shared overheads).
- B "Introduce Target Costing, as this will reduce the overall cost of recharges": This is irrelevant to the decision at hand. Target costing is a technique used during product/service design to manage costs relative to a target selling price, it has no direct bearing on a central overhead recharge allocation or a restaurant closure decision.
- C "Amend the proportions applied in the central recharge system so that Old Restaurant can be shown to be making a profit": This is not an appropriate management action, it involves manipulating internal reporting to create a misleading impression of profitability, rather than addressing the underlying economic reality. This does nothing to improve actual cash flows or company profit; it only distorts the numbers.

QUESTION 36

Correct Answer is A: FRW 700,000 million

Purchase of machinery (acquired 20X5) FRW 150,000

Purchase of land (acquired 20X4) FRW 550,000

Sunk cost = FRW 150,000 + 550,000 = 700,000

Why the other options are wrong:

- B FRW 950,000 million: This result from incorrectly including the construction of building (estimated) FRW 800,000 alongside the purchase of machinery FRW 150,000.
- C FRW 1,550,000 million: This is the sum of all four cost items ($50,000 + 800,000 + 150,000 + 550,000 = 1,550,000$), treating every cost in the table as sunk. This is incorrect because the site preparation and construction costs are future, avoidable costs — no commitment has yet been made, so these remain relevant to the decision (they can still be avoided if the project does not proceed) and must not be classified as sunk.
- D FRW 750,000 million: This likely results from adding site preparation (50,000) to land and machinery ($550,000 + 150,000 + 50,000 = 750,000$), again incorrectly treating the estimated, not-yet-committed site preparation cost as sunk, when the question specifically states no commitments have been made on this cost yet

QUESTION 37

- Correct answer is B
- A: Insurance on existing factories: No, already incurred regardless of the decision, not incremental
- B: Cost of building materials: Yes, a future, incremental cash cost incurred only if the factory is built
- C: Recharge of central administration costs: No, an apportionment of existing overhead, no **new** cash outflow arises
- D: Cost of the land: No, already purchased, a sunk cost, irrecoverable regardless of the decision

QUESTION 38

Correct Answer is A: Muddle should not go ahead with D Project as the discounted payback period is 3 years 6 months (i.e., because it exceeds the 3-year target)

Discounted payback period is found by accumulating the discounted cash flows until the initial investment is recovered:

Year	Discounted CF	Cumulative
1	17.9	17.9
2	14.3	32.2
3	11.4	43.6
4	7.6	51.2

By the end of Year 3, only FRW 43.6 million of the FRW 50 million investment has been recovered, a shortfall of FRW 6.4 million. This remaining amount is recovered part-way through Year 4:

Additional time needed = $6.4 \div 7.6 = 0.84$ of a year ≈ 10 months into Year 4

So the discounted payback period is approximately 3 years and 10 months, which exceeds Muddle's required cut off of 3 years or less.

Conclusion: Since the discounted payback period is longer than 3 years, Muddle should NOT proceed with D Project, which is the conclusion Option A reaches (note: the specific "3 years 6 months" figure in the option appears to be an approximation/rounding used in the original exam rather than the precise

3 years 10 months derived above, but the key decision-relevant point, that payback exceeds the 3-year threshold, is what makes A the correct choice).

Why the other options are wrong:

- B "go ahead as the discounted payback period is less than 4 years": This applies the wrong benchmark. Muddle's stated investment criterion is a discounted payback period of 3 years or less, not 4 years. Even though the actual payback period (~3 years 10 months) is indeed less than 4 years, this is irrelevant, the company's own decision rule requires 3 years or less, and the project fails that test.
- C "cash flows after 7 years total FRW 66 million, which is greater than the investment of FRW 100 million": This is internally inconsistent with the question's own figures, the investment stated is FRW 50 million, not FRW 100 million, and the cash flow data given only extends to Year 4, not Year 7. This option introduces figures unsupported by the question and does not apply the discounted payback method at all (it appears to reference undiscounted, extended, and altered figures).
- D "revise the calculations using a lower cost of capital": There is no indication in the question that the 12% cost of capital is inappropriate or needs revising. Arbitrarily lowering the discount rate to make a project appear acceptable would be poor practice, investment appraisal should use the company's genuine cost of capital, not one adjusted to produce a desired outcome.

QUESTION 39

Correct Answer is B: A moving average is an average of the results of a defined number of periods

Reasoning:

A moving average is calculated by taking the average of a fixed ("defined") number of consecutive periods of data (e.g., a 3-month or 12-month moving average), and then "moving" that window forward one period at a time as new data becomes available. This technique is commonly used to smooth out short-term fluctuations and reveal the underlying trend in time-series data. This is an accurate and correct definition of a moving average.

Why the other options are wrong:

- A "Systematic sampling is a method of establishing the underlying trend in a set of data across a period of time": This is incorrect. Systematic sampling is a *sampling technique* used in statistics/audit/research, where sample items are selected at regular fixed intervals from a population (e.g., every 10th item on a list), it is a method of selecting a sample, not a method of establishing trends over time. The description given actually describes concepts like time-series analysis or moving averages, not systematic sampling.
- C "The indexing technique is a method of establishing the underlying trend in a set of data across different parts of an organization": This is incorrect. Index numbers are used to measure changes in a variable (such as prices, costs, or output) over time relative to a base period, not to compare "different parts of an organization." This option confuses indexing (a time-based comparative measure) with something more like cross-sectional or divisional comparison, and also misapplies "underlying trend" language that more properly belongs to time-series trend analysis.
- D "The linear regression technique is applied to past results, and is not suitable for forecasting": This is incorrect. Linear regression is, in fact, commonly used precisely for forecasting, by establishing a mathematical relationship (a line of best fit) between historical variables, this relationship can then be extrapolated to predict/forecast future values. Saying it is "not suitable for forecasting" contradicts one of its most common and important applications in management accounting and statistics.

QUESTION 40

Correct Answer is C: 7.8%

Reasoning:

Since Nela Company reports in FRW, both years' costs must first be converted from USD to FRW using the exchange rate applicable in each respective year, before comparing them.

- 2014 cost in FRW = \$750,000 × FRW 1,300 = FRW 975,000,000
- 2015 cost in FRW = \$620,000 × FRW 1,450 = FRW 899,000,000

Decrease in FRW terms = FRW 975,000,000 – FRW 899,000,000 = FRW 76,000,000

Percentage decrease = FRW 76,000,000 ÷ FRW 975,000,000 × 100 = 7.8%

Why the other options are wrong:

- D 17.3%: This results from calculating the percentage decrease using the raw USD figures only, without converting to FRW at all: $(\$750,000 - \$620,000) \div \$750,000 = 17.3\%$. This ignores the exchange rate movement between the two years entirely and treats the cost decrease as if measured purely in dollar terms, but the question specifically requires the comparison in FRW (the company's reporting currency), accounting for the exchange rate change.
- A 10.7%: This results from a partial or inconsistent application of exchange rates, for example, applying only one year's rate to both years' figures, or a computational slip in converting one of the two years' costs (e.g., correctly converting 2014 but making an arithmetic error in converting 2015, or vice versa), leading to a distorted percentage that doesn't reflect the true FRW-to-FRW comparison.
- B 2.8%: This results from mixing up the exchange rate applies to which year (using the 2015 rate for the 2014 figure and the 2014 rate for the 2015 figure)

QUESTION 41

Correct Answer is C: Indexing

Indexing (using index numbers) is the technique specifically used to adjust monetary figures across different years for changes in price levels (i.e., inflation), allowing meaningful comparison in "real" terms rather than "nominal" terms. By expressing figures relative to a base period using a price index (e.g., a general price index or a specific cost index), a company can strip out the distorting effect of inflation and compare true, like-for-like changes in value over time.

Why the other options are wrong:

- A Time series: A time series is simply a set of data recorded at successive points in time (e.g., monthly sales over several years). It is used to analyse trends, seasonality, and cyclical patterns in data, but on its own, it does not *adjust* figures for inflation. A time series could include inflation-distorted (nominal) figures unless indexing is separately applied to it.
- B Net present value (NPV): NPV is an investment appraisal technique that discounts future cash flows to their present value using a cost of capital, to account for the time value of money, this is a different concept from adjusting historical or forecast monetary figures for the effects of inflation on comparability across years. While inflation can be a factor considered within NPV analysis (e.g., using a real vs nominal discount rate), NPV itself is not the technique used purely to enable inflation-adjusted comparison of monetary figures across years.
- D Linear regression: Linear regression is a statistical technique used to establish a relationship between variables (e.g., for trend estimation and forecasting), it does not adjust monetary values for inflation; it is concerned with modelling relationships/trends in data, not with correcting values for changing price levels.

QUESTION 42

Correct Answer is C

- The price paid for Material B appears to have been unchanged over the period
- The price paid for Material G may have increased, but Material G may also have been used less efficiently in August and September, compared with July

Reasoning:

To assess these comments properly, calculate the cost per unit each month (dividing total material cost by production), since total cost alone is misleading when production volumes vary from month to month.

Material B (FRW million):

Month	Production	Cost	Cost per unit
July	150,000	15	100
August	200,000	12	60
September	100,000	10	100

Cost per unit fluctuates (100 → 60 → 100) rather than moving consistently in one direction, and notably returns to the same level in September as in July. There is no clear, sustained upward or downward trend in the price paid — the fluctuation is more consistent with Material B behaving partly as a cost that doesn't scale purely with volume, rather than evidence of a genuine price change. The reasonable conclusion is that the price appears unchanged over the period, rather than confidently declaring it increased or decreased based on this noisy pattern.

Material G (FRW million):

Month	Production	Cost	Cost per unit
July	150,000	25	166.7
August	200,000	60	300
September	100,000	40	400

Cost per unit rises steadily and substantially across all three months (166.7 → 300 → 400) — and notably, in September, production actually fell to its lowest level of the quarter, yet cost per unit was at its highest. This is a strong signal that Material G's cost per unit increased due to some combination of (a) a genuine price increase, and/or (b) declining efficiency (more material being used per unit produced), particularly in August and September relative to July, which had the lowest cost per unit of the three months.

Why the other options are wrong:

- A: Incorrectly claims Material B's price increased, the data shows no consistent directional trend (100 → 60 → 100), so "increased" cannot be supported. It also claims Material G was used more efficiently in September, but September actually shows the highest cost per unit and lowest production, which points to less efficiency, not more. This gets both conclusions backwards.
- B: Claims Material G's price decreased, this contradicts the data, which shows cost per unit rising steadily each month, the opposite of a decreasing price.
- D: Correctly notes Material B's price appears to have decreased (a plausible but less well-supported reading than "unchanged," given the non-monotonic 100-60-100 pattern), but its comment on Material G, attributing the cost pattern to "several different suppliers" is speculative and unsupported by the data provided. The cost report gives no information about suppliers; the

appropriate, evidence-based comment relates to price and efficiency (usage) trends only, not supplier attribution.

QUESTION 43

- Correct answer is D: Directly addresses the problem at school level in a practical, policy-compliant manner
- A No action needed as the regional average is within 25:1: The average of 30:1 already exceeds the 25:1 policy limit and policy applies to each individual school, not the regional average
- B Ask older pupils to leave school, this is ethically unacceptable and educationally harmful, not a legitimate management response
- C Randomly move pupils between schools, Random reallocation ignores practical, geographical, and social factors and does not address the root cause

QUESTION 44

Correct Answer is B: Fraud involves the use of deception

Reasoning:

A defining characteristic of fraud is that it is an intentional act involving deception, perpetrators deliberately mislead, misrepresent, or conceal information in order to gain an unfair or unlawful advantage (typically financial), or to cause loss to another party. Deception is the essential element that distinguishes fraud from honest mistakes or errors.

Why the other options are wrong:

- A "Fraud is often accidental": This is incorrect and contradicts the fundamental nature of fraud. Fraud requires intent, it is by definition a deliberate act, not an accidental one. An accidental error or mistake (e.g., a genuine bookkeeping error) is not fraud, precisely because it lacks the intent to deceive.
- C "Fraud involves the misappropriation of monetary assets, but not physical assets": This is incorrect. Fraud can involve the misappropriation of any type of asset, not just cash or monetary assets, but also physical assets (e.g., theft or misuse of inventory, equipment, or other company property), as well as intangible assets (e.g., data, intellectual property) or the manipulation of financial information itself. Restricting fraud to monetary assets only is an unfounded limitation.
- D "Fraud is always perpetrated by individuals within an organisation": This is incorrect. While internal fraud (committed by employees, management, etc.) is common and often a key concern in management accounting/control contexts, fraud can also be perpetrated by external parties, such as suppliers, customers, contractors, or entirely external fraudsters (e.g., phishing scams, fraudulent invoicing schemes), sometimes even in collusion with insiders. Saying fraud is "always" internal is an absolute claim that is factually incorrect.

QUESTION 45

- Correct answer is A
- B is not correct: Computers can produce inaccurate outputs if data entered is incorrect, this is the "garbage in, garbage out" principle; technology alone does not guarantee reliability.
- C is not correct: There is no such requirement, a well-designed single system with strong internal controls can produce reliable, accurate, and compliant information.
- D is not correct: This reverses the correct priority, reliability is essential; cost is a secondary consideration and should never compromise the quality of information.

QUESTION 46

- Correct answer is A
- A fraud matrix: A fraud matrix maps the organisational structure against potential fraud risks by department, helping management identify where fraud is most likely to occur
- A control diagram: A control diagram illustrates internal control processes and flows; it does not specifically map fraud risks to departments
- An audit analysis: Audit analysis is a broad term referring to the examination of financial records, it is not a specific diagrammatic fraud-mapping tool
- A risk register: A risk register is a log of identified risks across the organisation generally, it is not specifically structured around departments and fraud risks in diagrammatic form

QUESTION 47

- Correct answer is D
- A is not correct: Begins with seeking regulatory approval, which is not a typical first step and places cost estimation after the change decision, which is illogical.
- B is not correct: Setting up a separate bank account and engaging external auditors to oversee the change are not standard steps in a system change process.
- C is not correct: Identifying areas of strength rather than weakness misses the point of the analysis; changes should not be conditional solely on cost savings, and reporting savings directly to the P&L is not a process step.

QUESTION 48

- Correct answer is B
- Incremental change: Incremental change involves small, gradual improvements to an existing system, Beag is replacing everything at once, not making minor adjustments
- Transformational change: A radical, organisation-wide overhaul, replacing six separate systems with one fully integrated system across all functions is a fundamental transformation
- Adjustment change: Adjustment change refers to minor modifications within an existing system, far too small in scope to describe what Beag is doing
- Accounting change: This is not a recognised category of system change management, it is a distractor with no technical meaning in this context

QUESTION 49

Correct Answer is A: RWF 27,100,000

Step	Item	RWF '000
1	2024 actual direct labour	22,000
2	Add: 5% pay rise (22,000 × 5%)	1,100
3	Adjusted recurring labour	23,100
4	Add: New packaging line labour	4,000
	2025 budgeted direct labour	27,100

- B (RWF 27,710,000): Applies the 8% general increment to 22,000 to get 23,760, then adds 4,000, incorrectly stacking both 8% and the 5% pay rise.
- C (RWF 26,000,000): Adds only the packaging line labour (22,000 + 4,000 = 26,000) and completely ignores the 5% pay rise, a common oversight under exam pressure.
- D (RWF 29,776,000): Applies 8% first (23,760), then also applies the 5% pay rise on top of the inflated figure before adding the packaging line, double inflation error.

QUESTION 50

Correct Answer is A: RWF 116,336,000

Item	RWF '000
Direct materials	48,000
Direct labour	22,000
Production overheads	15,000
Selling & distribution	9,500
Administration	7,200
Total 2024 actuals	101,700
Add: 8% increment ($101,700 \times 8\%$)	8,136
Inflated base (2025 budget before new project)	109,836
Add: New packaging line — materials	2,500
Add: New packaging line — labour	4,000
Total 2025 budgeted expenditure	116,336

- C (RWF 109,836,000): The inflated base only, student applies 8% correctly but forgets to add the Board-approved packaging line costs ($2,500 + 4,000 = 6,500$). Very common under time pressure.
- B (RWF 101,700,000): The raw 2024 actual total with no increment applied at all, the student simply sums the table and stops there.
- D (RWF 104,514,000): Strips out the non-recurring items ($6,000 + 3,500 = 9,500$) before applying 8%, giving an adjusted base of $92,200 \times 1.08 = 99,576$, then adds the packaging line. This is actually the refined best-practice approach, but the question explicitly asks for strict mechanical incremental budgeting. A very dangerous trap for well-prepared students.

END OF MARKING GUIDE AND MODEL ANSWERS