CERTIFIED ACCOUNTING TECHNICIANSTAGE 3 EXAMINATIONS

S3.2: MANAGEMENT ACCOUNTING

DATE: THURSDAY, 31 MARCH 2022

MODEL ANSWER AND MARKING GUIDE

SECTION A

Marking Guide

Question Number	Answer
1	**C**
2	**B**
3	**A**
4	**C**
5	**A**
6	**D**
7	**B**
8	**A**
9	**C**
10	**B**

Marks

2 Marks for each correct answer 2

Total marks for this section **20**

Model Answer

1. The correct answer is C

The only correct answer is C because cost of oils used in machinery and salary of supervisors working in factory are directly attributable to the production, rent of finished goods warehouse and Fees of the advertising agency are selling and administration costs which make A and B wrong.

2. The correct answer is B

B is the right answer because, BIRAMBO tea factory is a very small company which does not have capacity to hire permanent employees for those functions. Outsourcing is cost effective for BIRAMBO tea factory.

3. The correct answer is A

The correct answer is A, Internal controls, innovation and learning perspectives and finally customer perspectives, are the remaining perspectives. We do not have production perspectives which makes all remaining answers incorrect.

4. The correct answer is C

The correct answer is C, the statement mentioned is the definition of Efficiency, and this makes other answers incorrect.

5. The correct answer is A

The correct answer is A, the increase in inflation of raw materials will increase the cost of raw materials, which negatively affects the proposed materials cost budget.

6. **The correct answer is D**

The correct answer is D, variable production overhead total variances is equal to the summation of Overhead Expenditure and efficiency (50A+40F=10A), which makes it to be the correct answer.

7. **The correct answer is B**

The correct answer is B, all the three challenges are faced by public institutions when measuring their performance.

8. **The correct answer is A**

The correct answer is A,

	FRW
Actual fixed production overheads	
Absorbed fixed production overheads (8,000*FRW50)	400,000
Over-absorbed fixed overhead	(40,000)
Actual fixed production overheads	360,000

9. **The correct answer is C**

The correct answer is C,

Direct labor rate variance can be favorable only when labor cost per unit is less than what it should be, hours worked is used in direct labor efficiency and number of units produced is used in direct materials usage variance.

10. **The correct answer is B**

Data corrected by research questionnaires (Surveys) are primary data source, while historical market share data corrected from fashion regulator industry and historical projections from senior data management strategists are historical data.

SECTION B

QUESTION 11

Marking Guide	**Mark(s)**
(a) Compute Variance and recommend a course of action.	
(i) Material Price variance (1 mark for calculation and 1 mark for valid recommendation)	2
(ii) Material usage variance (1 mark for calculation and 1 mark for valid recommendation)	2
(iii) Fixed overhead expenditure variance (1 mark for calculation and 1 mark for valid recommendation)	2
(iv) Fixed overhead efficiency variances (1 mark for calculation and 1 mark for valid recommendation)	2
Maximum	**8**
(b) Suggests two benefits of launching standard costing in Ukuri Company Ltd.	**2**
Total	**10**

Model Answer

a)

(i) Material price variance

The inventory is valued at standard costs, material price variance is based on materials purchased,

	FRW "000"
22,000,000kg material should have cost us (*400)	8,800,000
But did cost us	9,000,000
	200,000A

Material price variance is Adverse because it costs more compared to the budgeted. UKURI Company Ltd will need to look for alternative suppliers to get cheap materials. Similarly, Ukuri may consider importing cheap materials or signing forward contracts with suppliers to help fix price changes as well as negotiating for discounts on bulk purchases.

(ii) Material Usage Variance

	Kg
220,000 iron sheet should have taken (*100kg)	20,000,000
Actual material purchased	21,400,000
	1,400,000A
Standard price per kg	***400**
	560,000,000A

The material usage variance is Adverse, I suspect that UKURI Company Ltd is losing more materials in the process. The recommendation that UKURI Company Ltd should revisit its process and minimize waste in the process to material used. UKURI Company Ltd should also consider upgrading its machineries to reduce waste units and also consider use of skilled labor leading to less wastages.

(iii) Fixed overhead expenditure variance

	FRW "000"
Budgeted fixed overheads	120,000
Actual Fixed overheads	100,000
Fixed overhead expenditure variance	**20,000F**

The Fixed overhead expenditure variance is Favorable because, the actual costs used are less than what was budgeted for which is good in terms of cost minimization and UKURI Company Ltd needs to maintain this cost minimization procedure.

(iv) Fixed overhead efficiency variance

220,000 iron sheet should have taken (*0.5hrs)	110,000 hrs.
Actual hours worked	120,000 hrs.
10,000A	
Standard fixed overhead abs per hour	*1200
12,000,000A	

Fixed overhead efficiency variance is Adverse because, the company spent more hours in production than what were budgeted, the management of UKURI Company Ltd need corrective action to bring variances back to the target level.

b) The implementation of standard costing has the following benefits to UKURI Company Ltd.

(i) Standard costing will help in inventory valuation and cost of production for cost accounting purposes

(ii) Standard costing will act as a controls device, establishing standards (planned) UKURI Company Ltd will help to calculate variances and course of action will be taken accordingly.

(iii) Standard costing provides achievement targets and yardsticks against which performance will be measured.

(iv) Standard costing improves planning and budgetary controls.

QUESTION 12

Marking Guide	**Mark(s)**
(a) Calculate up to Production required	2
waste rate calculation	2
Total Production required	1
Maximum	**5**
(b) Actual hours required.	**2**
(c)	
Identification of limiting factor	1
suggested two recommendations	2
Maximum	**3**
Total	**10**

Model answer

a)

Production Budget

		Units
Sales		84,000
add closing Inventory		650
		84,650
Less Opening inventory		150
Production required		84,500
Waste rate	(1.05*1.15) -1	15.50%
Total Production required	(84500*100)/84.5	**100,000**

b)

Direct labor budget

		Hours
Standard hour per unit		5
Total hours Required	(100,000*5)	500,000
Productivity Ratio		80%

Actual Hours Required	(500,000*100)/80	**625,000**

c) The limiting factor at TONI Ltd is **Labor hours**, identified as follows:

Hours		
Budgeted hours available	(150*4000)	600,000
Actual hours required		625,000
Shortfall in labor hours		**25,000**

The draft budget shows that there are no enough budget direct labor hours to meet the production requirement. The following are suggested solutions.

(i) Encouraging workers to do some overtime hours

(ii) Consider hiring new employees, if long-term production prospect is sustainable in future

(iii) On job training that can increases the current productivity ratio

(iv) Reduce waste rate below to current level

SECTION C

QUESTION 13

Marking guide	**Mark(s)**
a)	
Calculation 10 Ratios **(**1 Mark for each**)**	10
Interpretation of 10 Ratios (0.5 Mark for each)	5
Maximum	**15**
b) General conclusion on the performance of RWEMA Enterprise	**2**
c) Three challenges (1 Mark for each)	**3**
Total	**20**

Model Answer

a)

RATIOS					
				Industry comparison	**Observation**
	Formula	**2020**	**2019**	**2020**	
Profitability Ratio					
Gross Profit Margin	Gross profit /Revenue*100%	30%	26%	35%	Bad
Net Profit Margin	PAT/Revenue*100%	18%	15%	17%	Good
Liquidity ratios					
current ratio	CA/CL	4.6	3.7	3	Good
Quick ratio	(CA-Inventory)/CL	3.2	2.7	2.1	Good
Efficiency Ratio		**Days**	**Days**	**Days**	
Inventory days	(Inventory/Cost of sales) *365	179	158	150	Bad
Receivable's days	(Receivables/Sales) *365	137	142	131	Good
Payable days	(Payables/Cost of sales) *365	132	153	140	Bad
Performance Ratios					

Aset turnover	Revenue/Asset	1.03	0.96	0.98	Good
Return on Equity	(Net profit/Equity capital) *100%	27%	23%	27%	Good
Solvency Ratio					
Interest Coverage Ratio	Profit before interest/Interest Charges	5.6	5.5	6.5	In Line

(i) Profitability: Gross profit and Net Profit margin is 30% and 18% respectively, comparing to the industry of 35% and 17% respectively. This shows that gross profit margin is lower compared to the industry, but it is doing a good job in managing operating margin as it higher than the industry average. RWEMA Enterprise needs to improve in managing its cost of production as it is above the industry.

(ii) Liquidity Ratio: RWEMA Enterprise is doing a good job, in managing liquidity, both current ratio and quick ratio is above the industrial average. RWEMA should continue having liquid assets but also make sure not to hold excess cash, because it can reduce profitability.

(iii) Efficiency ratios: based on the calculation above, inventory holding days are more compared to the industry which is a bad thing. Receivable days are less, and this is desirable, and payable days are less which is not desirable, but it is a good thing also because it helps to develop good relationships with suppliers. Generally, efficiency ratio is in the line with the industry.

(iv) Performance ratios: all performance ratios are good and better than industry, and this shows that management is doing well in terms of providing enough return to the shareholders (ROE). It is also doing great in terms of using assets to generate sales (Asset Turnover Ratio).

(v) Solvency Ratio: RWEMA Enterprise is generating enough to cover interest payments to the debt providers and it is in the line with industry.

b) **Conclusion**

Based on the above analysis, RWEMA Enterprise is doing better than the industry based on the ratios calculated and benchmarked with the industry. Rwema should also look into improving itself on a year-to-year basis.

c) The following are challenges of using ratios in performance evaluation

(i) Ratios are based on the historical information which can’t define what is going to happen in future
(ii) Ratios are based on the accounting data which can be manipulated by management of the company
(iii) Ratios ignore other non-financial performance metrics, like customers satisfaction and others.

(iv) Ratios are meaningful when you have industry comparison or have more historical trend for interpretation
(v) It can be difficult to compare within industry where sharing information is difficult

QUESTION 14

Marking guide	**Mark(s)**
(a) Differentiate between capital budget and a master budget	
Capital budget (1 Mark for definition and 1 Mark for example	2
Master budget (1 Mark for definition and 1 Mark for example	2
Maximum	**4**
(b) Format of Report on Reasons why net profit and net cash flow of Rango Ltd may differ	**2**
Reasons why net profit and net cash flow of Rango Ltd may differ	
Purchase of non-currents asset	2
Sales of non-currents asset	2
Sales goods on credit	2
Purchases goods on credit	2
Loan issuance, overdraft and share	2
Any other valid point	2
Maximum	**8**
(c) Two (2) ways to improve cash flow cycles at RANGO Ltd (1 Mark for each)	**2**
(d) Mention two negative impacts of holding a lot of cash (cash drag) at Rango Ltd	
lowers RANGO Ltd's overall profitability (return)	2
Reduces the value creation for RANGO Ltd	2
Lowers the performance ratios	2
Excess cash may cause the management of RANGO Ltd to spend more (unplanned expenses to reduce cash holding).	2
Maximum	**4**
Total	**20**

Model Answer

a)

A capital budget is a budget for cost of non-current assets, it means a budget for purchases of non-current asset. Capital budget is for long term investment for RANGO Ltd. The following examples can be included in capital budget: Acquisition of drug license, purchases of Property, Plant and Equipment, Acquisition of computer software, development costs for drugs and etc.

A Master Budget is defined as a consolidated budget, that includes all prepared functional budgets which consists of budgeted statement of profit and loss, budgeted statement of financial position and cash budget that provides an overall picture of the planned performance for RANGO Ltd.

b) Draft report showing the reasons why net profit and net cash flow of RANGO Ltd differ

Report

To: Management of RANGO Ltd

From: Management Consultant

Date: April, 2021

Subject: The reasons why net profit and net cash flow of RANGO Ltd

Net profit measures how much profits the company generates in the period (when applying the accruals principle) and this differs from the net cash flow because of the timing factor. Below are some of the reasons as to why net profit differs from the net cash flow.

(1) Purchase of non-currents asset - when RANGO Ltd purchases an asset, it is a cash outflow but it is not reflected in income statement as total amount instead, depreciation (non-cash charges) is charged to the profit and loss statement. So net cash flow and net profit will differ due to timing differences.

(2) Sales of non-currents asset - when RANGO Ltd sales its non-current asset, it will result in either a loss or gain in the Statement of Profit and Loss but the total amount will be recorded as cash inflows in the Statement of Cash Flows. So net cash flow and net profit will differ due to timing differences as well.

(3) RANGO Ltd Sales goods on credit - selling good on credit will not be reflected in cash flow statement until payment is made, but the Statement of Profit and Loss will recognize sales (accrual basis).

(4) RANGO Ltd Purchases goods on credit - the cost of goods will reflect in the purchases of goods, but cash flow will not reflect this transaction until payment is made. So, the net cash flow and net profit will differ due to timing differences.

(5) RANGO Ltd loan issuance, overdraft and share repurchases - cash is received from the above transactions, and it is cash inflows but nothing to reflect in Profit and Loss Statement. So net cash flow and net profit will differ for the period.

c) Two (2) ways to improve cash flow cycles at RANGO Ltd.

Cash Conversion cycle = days inventory outstanding + days sales outstanding - days payables outstanding.

The following are the two ways to improve cash conversion cycle:

(1) Reducing inventory days outstanding - the sales team of RANGO Ltd needs to work hard to sale outstanding inventory in a short time.

(2) Reduce days sales outstanding - here RANGO Ltd needs to work closely with customers to encourage them to pay as early as they possibly can.

(3) Improvement in recovery policies to allow RANGO Ltd to reduce days sales outstanding

(4) Negotiating with suppliers to pay at a later date, and this will increase days payable but should be done in a manner that will not disrupt relationship with suppliers.

d) Negative impact of holding a lot of cash (Cash drag) for RANGO Ltd

The following are the negative impacts of holding a lot of cash (Cash drag) at RANGO Ltd:

(1) It lowers RANGO Ltd’s overall profitability (return)

(2) It reduces the value creation for RANGO Ltd

(3) It lowers the performance ratios

(4) Excess cash may cause the management of RANGO Ltd to spend more (unplanned expenses to reduce cash holding).

QUESTION 15

Marking Guide	**Mark(s)**
a) Definition of Controllability principle	**2**
b) Difference between Operational and planning errors	
Operational errors	1
Planning errors	1
Maximum	**2**
Identifying Responsible Managers	**2**
c) Any item flexed (1 Mark for each and final answer 1 Mark)	**6**
d) Analyzing Burera Ltd using balance scorecard model, 2 Marks for each perspective	**8**
	20

Model Answer

a) Controllability principle means that managers of responsibility centers should only be held accountable for the costs over which they have some influence, so every manager at Burera Ltd need to be accountable on the costs he/she has some control on.

b) - Planning manager should be accountable for Planning variances (errors)
- Operational Manager should be accountable for operational variances (errors)

Planning variance is a variance that may arise due to planning errors. Such a variance may have been caused by a revision in the budget or standard costs, for which an operational manager should not be made responsible and or accountable for.
Operational variances are those caused by a difference between a revised and actual budget and operational managers should be accountable for such a variance.

c) Flexed budget

	Fixed Budget			**Flexed Budget**	
	FRW"000"	**FRW"000"**	**Workings**	**FRW"000"**	**FRW"000"**
Sales and production Unit		110,000			120,000
Sales		16,500	(16,500*120,000)/110,000		18,000
Variable cost					
Direct material	4,000		(4,000*120,000)/110,000	4,364	
Direct Lobar	2,500		(2,500*120,000)/110,000	2,727	
Variable overhead	1,500	8,000	(1,500*120,000)/110,000	1,636	8,727
Contribution		**8,500**			**9,273**

Fixed cost	450	450
Profit/Loss	**8,050**	**8,823**

d) A Balance Scorecard Model is emphasized in all areas of performance measurement unlike financial performance It has four dimensions: Customer perspective, Internal business perspective, financial perspective and Innovation and learning. The following are the suggested improvement using the Balanced Scorecard Model:

Financial Persecutive

- Burera Ltd management account needs to calculate accounting ratios, doing cash flow forecast, sales forecast and use trends to obtain and benchmark with peers for performance improvement.

-Customer Perspective:

Burera Ltd can use a Balanced Scorecard Model to fucus on customer satisfaction and reduce customer complaints by introducing products with improved quality, on time delivery and developing customers partnerships.

- Internal Business perspective

Burera Ltd employees are not happy with the IT equipment which is old, and this affects the smoothness of the work processes and thereby affecting productivity. Burera Ltd will need to do internal control revisits and upgrade its IT equipment.

- Innovation and learning perspective

Burera Ltd need to train employees as employees keep claiming that, they don't have on the job training. This will improve productivity, reduce time for manufacturing processes, develop products on customer focus and this will also impact on the overall performance of Burera Ltd.

END OF MARKING GUIDE AND MODEL ANSWER