



## CERTIFIED ACCOUNTING TECHNICIAN STAGE 2 EXAMINATIONS S2.2 MANAGING COSTS AND CASH FLOWS

**THUSDAY: 05 DECEMBER 2019** 

## **INSTRUCTIONS:**

1. Time allowed: 2 hours

2. This examination has **one** section only: **Section A**.

3. Section A has **50 compulsory** multiple choice questions equal to 2 marks each.

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1. An organisation sold a vehicle which they had originally purchased for RWF52m. The vehicle had a total accumulated depreciation of RWF36m at the time of disposal.

If the organisation achieved a RWF10m profit on disposal, how much were the cash proceeds received for selling the vehicle?

- A RWF 6m
- B RWF 10m
- C RWF 16m
- D RWF 26m
- E None of the above (2 marks)
- 2. Which of the following should be included as overheads?
  - (i) Indirect materials
  - (ii) Direct materials
  - (iii) Indirect expenses
  - (iv) Direct labour
  - A (iii) only
  - B (ii) and (iv)
  - C (i) and (iii)
  - D (i), (ii), (iii) and (iv)
  - E None of the above

3. A company's overheads have been allocated and apportioned to the production and service cost centres as follows:

(2 marks)

Production centre 1: R RWF 4.7m
Production centre 2: S RWF 3.1m
Service centre 1: Stores RWF 0.8m
Service centre 2: Personnel department RWF 1.2m

The overheads of the service departments are apportioned on the basis of direct labour hours worked. Stores worked 1,800 hours, 2,200 hours and 500 hours for R, S and the personnel department, respectively. The personnel department worked 3,200, 1,600 and 600 hours for R, S and stores, respectively.

Using the direct method of apportionments, how much are the total overheads for production centre S?

- A RWF5.86m
- B RWF3.94m
- C RWF5.73m
- D RWF3.85m

E None of the above (2 marks)

4. The variable costs to make a new television are RWF460,000 with fixed costs estimated to be RWF30m. Each television will be sold for RWF640,000.

If 200 televisions are expected to be sold, how much is the margin of safety?

- A 167 units
- B 16.5%
- C 19.8%
- D 76.5%

E None of the above (2 marks)

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5.	Whi	ch of the following are elements of the cost of capital?	
	(i)	Risk free rate of return	
	(ii)	Premium for business risk	
	(iii)	Premium for rate of return	
	A	(i) only	
	В	(ii) only	
	C	(ii) and (iii)	
	D	(i) and (ii)	
	E	None of the above (2 marks)	,
6.	Fran	cis is paid RWF8,000 per piecework hour and works a 40 hour week making two	,
	prod	ucts. Each unit of Product X and Product Y should take 3 hours and 5.5 hours to make,	
	-	ectively.	
	-	much pay will Francis earn for one week if he makes 8 units of Product X and 5 units of	•
		luct Y?	
	A	RWF 412,000	
	В	RWF 320,000	
	C	RWF 472,000	
	D	RWF 104,000	
	Е	None of the above (2 marks)	i
7.	Ved	aste is a budget holder and responsible for employing additional labourers on a casual	
		s. The budget for casual labour is RWF17.5m, based on an hourly rate of RWF17,500.	
		to some permanent staff being off sick, Vedaste actually recruited 1,200 hours of casual	
	labo		
	Wha	at variance should be reported for casual labour?	
	A	RWF 21m adverse	
	В	RWF 3.5m adverse	
	C	RWF 3.5m favourable	
	D	RWF 200 adverse	
	Е	None of the above (2 marks)	i
8.	At tl	ne end of November, a company holds 31 units of Product T as inventory and estimates it	
	will	sell 180 units of Product T during December.	
	If th	e company plans to hold 22 units of Product T as inventory at the end of December, how	
	man	y units will it need to produce in December?	
	A	180	
	В	189	
	C	202	
	D	149	
	E	None of the above (2 marks)	
9.	Clau	de budgeted that cash payments in June would be RWF36.25m. However, an adverse	
	varia	ance of RWF0.86m was identified for cash payments made in June.	
	Wha	t were the total cash payments actually made in June?	

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	A B C D	RWF 35.39m RWF 31.175m RWF 37.11m RWF 36.25m None of the above (2 mark	cs)
10.	Whi	ch of the following levels may be affected by the economic environment?	
	(i) (ii) (iii)	National International Local	
	A B C D	(i) only (i) and (ii) (iii) only (i), (ii) and (iii)	
	E	None of the above (2 mark	(s)
11.	_	nificant variances have been identified on labour expenditure. An adverse labour rance of RWF18,640 and favourable labour efficiency variance of RWF12,520 have be orted.	
	Whi	ch of the following reasons would explain the labour variances reported?	
	A B C D	Apprentices employed Inadequate training for staff Inferior quality of material used Poor equipment provided None of the above (2 mark	KS)
12.		usiness has surplus funds to invest and is looking at investing to gain the highest retuible even if there is some risk in the investment.	ırn
	Wha	at attitude to risk is the business demonstrating?	
	A B C D	Risk seeking Risk neutral Risk averse Risk diversification None of the above	*a)

13. A possible investment has a capital cost of RWF2m in year 0 and net cash inflows of RWF350,000, RWF500,000, RWF850,000 and RWF920,000 in years 1 to 4, respectively.

Cost of capital is 8% with discount factors of 0.926, 0.857, 0.794 and 0.735 in years 1 to 4, respectively.

What is the net present value for this investment?

- A RWF251,700
- B RWF234,620
- C RWF2,103,700
- D RWF2,234,620
- E None of the above (2 marks)

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14. Current assets are RWF8.23m, comprising RWF4.26m of inventory and RWF3.72m cash. Current liabilities are RWF6.85m, which includes trade payables of RWF3.25m. What is the current ratio? 0.58 Α 2.29 В  $\mathbf{C}$ 1.10 D 1.20 None of the above E (2 marks) 15. A department's overheads were under-absorbed by RWF16.5m. Budgeted and actual overheads were RWF220m with budgeted machine hours 160,000 used to calculate the budgeted overhead absorption rate (OAR). How much were the actual machine hours? Α 160,000 148,000 В  $\mathbf{C}$ 172,000 D 12,000 Е None of the above (2 marks) Cissy and Etienne are both responsible for costs and revenues, David is responsible for costs

only, Alphonse is responsible for costs, revenues and net assets, while Bella is responsible for the profit earned from her area of the business.

Which manager is responsible for a cost centre?

- Α Cissy
- В Bella
- C Alphonse
- Etienne D
- None of the above E (2 marks)

James has been asked to calculate the budgeted overhead absorption rate (OAR) for the company's marketing department. The marketing department has 12 members of staff who do not complete timesheets and use zero machine hours. The sales for the forthcoming year are estimated to be RWF92m.

On which basis should James calculate the OAR for the marketing department?

- Α Direct labour hours
- Machine hours В
- C Sales value
- D Consumer cost

None of the above (2 marks)

Predictions suggest a company will sell 850 computers at a selling price of RWF960,000 each. Of the customers, 80% are expected to purchase on one month's credit. Of the credit sales, 5% are not expected to pay.

How much income is forecasted from the computer sales?

- A RWF783.36m
- В RWF775.2m
- C RWF163.2m
- RWF816m D

E None of the above (2 marks)

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	Budget	Actual	Variance
Production (units)	1,000	1,200	
Direct materials (RWF'000)	3,300	3,800	500 adverse
Direct labour (RWF'000)	24,000	29,000	5,000 adverse
Fixed overheads (RWF'000)	2,000	2,000	0
Total costs (RWF'000)	29,300	34,800	5,500 adverse

What variance should be reported for total costs based on a flexed budget?

- A RWF 40,000 adverse
- B RWF 360,000 adverse
- C RWF 40,000 favourable
- D RWF 360,000 favourable
- E None of the above (2 marks)
- 20. Which of the following would be classed as revenue cash payments?
  - (i) Outright purchase of a new vehicle
  - (ii) Purchase of goods for resale paid in full
  - (iii) Depreciation for non-current assets
  - A (i) only
  - B (i) and (iii)
  - C (ii) and (iii)
  - D (ii) only
  - E None of the above (2 marks)
- 21. Which of the following is /are purpose(s) of management accounting information?
  - (i) Planning
  - (ii) Publishing financial statements
  - (iii) Decision-making
  - A (i) only
  - B (i) and (iii)
  - C (ii) only
  - D (ii) and (iii)
  - E None of the above (2 marks)
- 22. A company has three production cost centres and two service cost centres. There is reciprocal work between the two service cost centres.

Which of the following statements is/are true?

- (i) Step-down method of re-apportionment ignores inter-service cost centre work
- (ii) Direct method of re-apportionment recognises the inter-service cost centre work
- (iii) The order that service-cost centre overheads are re-apportioned is irrelevant with the direct method
- A (i) and (ii)
- B (ii) only
- C (iii) only
- D (i) and (iii)
- E None of the above (2 marks)

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23. Based on forecasts that 800 units will be sold in June, the sales manager budgets they will receive RWF24m cash receipts from sales in June. Sales in April and May were 750 units and 700 units, respectively. All sales are made for RWF30,000 per unit.

If 60% of sales are made on credit, with 20% paying the following month and 80% paying after 2 months, by how much is the sales manager's budgeted cash receipts over estimated?

- A RWF1.62m
- B RWF0.72m
- C RWF1.08m
- D Nil(0)

E None of the above

(2 marks)

- 24. Which of the following types of money market financial instruments describes an IOU issued by a large company which can either be held to maturity or sold earlier to a third party?
  - A Bills
  - B Commercial paper
  - C Certificate of deposit
  - D Deposits

E None of the above

(2 marks)

25. An organisation has used the following number of energy units with the following costs for the last three months.

	Energy units	Total energy costs (RWF)
January	310	20.3m
February	240	18.2m
March	275	19.25m

What are the fixed energy costs using the high-low method?

- A RWF11m
- B RWF2.1m
- C RWF30,000

D RWF70,000 (2 marks)

- 26. Which of the following describes the duty of care and trust that one person or entity owes to another?
  - A Liquidity
  - B Governance
  - C Fiduciary
  - D Ethics

E None of the above

(2 marks)

27. A business has taken out a loan of RWF36m. The loan is to be repaid in 48 equal monthly instalments of RWF930,000. A simple flat rate interest is to be charged.

What is the simple annual interest rate?

- A 24%
- B 6%
- C 2.08%
- D 19.35%

E None of the above

(2 marks)

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28. Eustache has been asked to calculate the production department's overhead absorption rate (OAR) for the coming year. Budgeted overheads are RWF48.4m and it is expected 24,200 machine hours and 36,000 direct labour hours will be utilised. Changes in the company's strategy and production practices have meant that labour hours now exceed machine hours, so it has been decided to move to using a labour hour basis for calculating the OAR.

What is the OAR using direct labour hours?

- A RWF2,000
- B RWF1,344
- C RWF804
- D RWF4,102
- E None of the above (2 marks)
- 29. Brigitte is in charge of her organisation's inventory and has identified the following information for the organisation's ordering and usage of wood:
  - Re-order quantity 390 kg
  - Minimum usage 26 kg per day
  - Average usage 48 kg per day
  - Maximum usage 64 kg per day
  - Lead time 4–12 days (average of 8 days)

What is the maximum level of inventory that Brigitte should let the organisation hold?

- A 1,054 kg
- B 768 kg
- C 384 kg
- D 664 kg
- E None of the above (2 marks)

30. At the beginning of October, a company held 38 metres of material as inventory, which had been purchased for RWF33,000 per metre. On 13<sup>th</sup> October, a further 40 metres of material was purchased at RWF31,600 per metre, with 28 metres issued on 15<sup>th</sup> October and 16 metres issued on 28<sup>th</sup> October.

If the company applies First-In-First-Out (FIFO), what is the closing inventory value at the end of October?

- A RWF1,122,000
- B RWF1,097,588
- C RWF1,098,200
- D RWF1,074,400
- E None of the above (2 marks)

31. A company makes three products with the following information:

	Product L	Product M	Product N
Contribution per unit	RWF64,000	RWF72,000	RWF48,000
Direct materials used per unit	12 kg	8 kg	6 kg
Monthly demand	140	160	180

There are only 2,000 kg of direct materials available.

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	How	many units of Product L should be made to maximise contribution?
	A B C D	Nil(0) 140 60 76 None of the above (2 marks)
32.	at a	ompany budgeted to make 450 standard sized windows, using 2.5 kg of glass per window a cost of RWF23,000 per kg. The company actually made 460 windows costing F32,430,000 for the glass.
	Wha	at is the price/efficiency variance for glass?
	A B C D	RWF6,555,000 favourable RWF6,555,000 adverse RWF5,980,000 adverse RWF5,980,000 favourable None of the above  (2 marks)
33.	Whi high	ch of the following factors will cause the interest rate charged on loan finance to be er?
	A B C D	Low risk project Skilled and experienced management team Repayment of capital installments Long time period in which to repay loan None of the above (2 marks)
34.	if an	istella has organised with the bank that the company may go overdrawn by up to RWF2m and as required. At the moment, the company is RWF0.36m overdrawn and Christella cipates this will increase by RWF0.53m in the next few days.
	How	w much is the company's overdraft facility?
	A B C D	RWF2m RWF0.36m RWF0.89m RWF1.64m None of the above (2 marks)
35.	38 d	
	If th	e company's cash operating cycle is 56 days, how long is the company's trade payables.

If the company's cash operating cycle is 56 days, how long is the company's trade payables payment period?

30 days A

В 82 days

C 46 days

102 days D

(2 marks) None of the above Ε

36. The net cash flow for March has been forecast as being RWF6.6m, with cash payments made for rent of RWF17.6m and cash receipts from sales of RWF42.4m. The closing cash balance for February was RWF1.26m.

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- A RWF19.46m
- B RWF18.2m
- C RWF32.66m
- D RWF31.4m
- E None of the above (2 marks)
- 37. Which of the following should be classed as capital expenditure?
  - A Repairs to a building
  - B Redecorating an office block
  - C Purchase of books for resale
  - D Legal costs to buy a new warehouse
  - E None of the above
- 38. Which of the following is/are principle(s) of marginal costing?
  - (i) Period fixed costs are the same for any volume of sales and production
  - (ii) Profit measurement should be based on an analysis of total contribution
  - (iii) The extra costs incurred in making an extra product unit are the variable production costs

(2 marks)

- A (i), (ii) and (iii)
- B (ii) and (iii)
- C (ii) only
- D (i) only
- E None of the above (2 marks)
- 39. The unit cost card for manufacturing one television is:

	RWF'000
Direct materials	420
Non-production overheads	10
Production overheads	40
Direct labour	360

How much is the production cost for one television?

- A RWF790,000
- B RWF830,000
- C RWF820,000
- D RWF780,000
- E None of the above (2 marks)

40. Nadine, a Management Accountant at a hospital, is calculating the cost per patient per day. She estimates that the main element of this cost will be related to medical staff.

What type of costing is Nadine applying?

- A Cost-plus pricing
- B Job costing
- C Service costing
- D Batch costing
- E None of the above (2 marks)

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41.	Charles has been asked to classify costs by business function.  How should the organisation's Chief Executive's salary be categorised?  A Production  B Selling and Distribution  Financing  Administration  E None of the above  (2 market)	κs)
42.	Didier has been asked to calculate the overhead absorption rate (OAR) for the producti department that plans to use 14,000 machine hours and 26,000 direct labour hours. Budget overheads for the production department are RWF300m.	
	What OAR should Didier calculate?	
	RWF86.67 per direct labour hour RWF7,500 per hour RWF21,428.57 per machine hour RWF11,538.46 per direct labour hour None of the above (2 mark	KS)
43.	Which of the following does the National Bank of Rwanda try to control throumplementation of the Government's monetary policies?	gh
	<ul><li>i) Supply of money</li><li>ii) Inflation</li><li>iii) Interest rates</li><li>iv) Availability of credit</li></ul>	
	A (i), (ii), (iii) and (iv) B (iii) and (iv) C (ii), (iii) and (iv) D (i) and (ii) E None of the above (2 mark)	κs)
44.	Claude is responsible for monitoring inventory and reordering as necessary, using the Economic Order Quantity (EOQ) model. The company sells laptops and Claude has estimate that it costs RWF9,000 to hold one computer for one year and that the company sells 12,00 computers in one year. The company's supplier charges RWF20,000 for each order. Clauseeds to place an order for computers with the supplier.	ted 00
	How many computers should Claude order?	
	A 104 B 173 C 231 D 200 E None of the above (2 mark	κs)
45.	Which of the following is not an advantage of the payback period?	
	A Simple to calculate B Easy to understand Takes account of the time value of money	

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(2 marks)

D Е

Considers risk

None of the above

46. Each mobile telephone that a company manufactures costs them RWF35,000 in materials.

How would this cost be classified?

- A Fixed
- B Variable
- C Semi-variable
- D Stepped

E None of the above (2 marks)

47. Kevin has been asked to apply a costing method that includes variable costs in the cost units and writes off the fixed costs as period costs.

What costing method has Kevin been asked to use?

- A Absorption
- B Activity based
- C Prime
- D Marginal

E None of the above (2 marks)

48. To be approved by a company's management, all investments must achieve a three-year payback period target. Investments with the shortest payback period are prioritised. A company is considering the following three projects:

	Project F	Project G	Project H
Capital cost (year 0)	RWF3m	RWF2.2m	RWF1.8m
Annual net cash inflow	RWF650,000	RWF800,000	RWF580,000

Which project or projects should be chosen, based on the company's selection criteria?

- A Project G only
- B Projects G and H
- C Project F only
- D Projects F and H

E None of the above (2 marks)

49. The water temperature of a swimming pool is recorded every day. The following temperatures have been recorded for the last week of June:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
29°C	28°C	26.5°C	27°C	32°C	$28^{0}$ C	28.5°C

What is the three-day moving average for Wednesday?

- A  $27.8^{\circ}$ C
- B  $28.4^{\circ}$ C
- C  $28.5^{\circ}$ C
- D  $26.75^{\circ}$ C
- E None of the above (2 marks)

50. The inventory held by a company decreased by 90 units during April. The overhead absorption rate was RWF24,000 per unit and the monthly profit for April was reported as RWF320,000 using absorption costing.

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How much would the profit for April be using marginal costing?

- A RWF2,480,000
- B RWF2,160,000
- C RWF1,840,000
- D RWF296,000
- E None of the above

(2 marks)

Total (100 marks)

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