
CERTIFIED ACCOUNTING TECHNICIAN (CAT)
STAGE 2 EXAMINATION
S2.2 MANAGING COSTS AND CASH FLOWS
PILOT PAPER

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.

Section A

1. Brigitte is a manager responsible for the revenues, costs and net assets for her area of the business.

Which type of responsibility centre does Brigitte have?

- A Profit
- B Cost
- C Revenue
- D Investment
- E None of the above

(2 marks)

2. Alphonse is a trainee management accountant who has been asked to apportion overhead costs on a fair basis between cost centres.

Which of the following bases of apportionment should Alphonse use to apportion the insurance overhead cost, where the insurance policy covers equipment in four different cost centres?

- A Floor area occupied
- B Book value of equipment
- C Percentage of sales made
- D Direct labour hours used
- E None of the above

(2 marks)

3. Treasury Bills are used by governments to help control the economy.

Which of the following will be affected from the Government selling Treasury Bills?

- (i) Interest rates
- (ii) Supply and demand for investments
- (iii) Asset base of banks

- A (i) only
- B (ii) and (iii)
- C (i), (ii) and (iii)
- D (i) and (iii)
- E None of the above

(2 marks)

4. A company's sales are RWF3,200,000 in February, RWF2,850,000 in March and RWF2,920,000 in April. Of these sales, 60% are paid in cash immediately, with the remaining 40% of sales made on credit. Of these credit sales, 70% are paid in the following month and 30% are paid two months after the sale.

How much will the cash inflow be in April from sales?

- A RWF2,920,000
- B RWF2,990,000
- C RWF2,941,000
- D RWF2,934,000
- E None of the above

(2 marks)

5. David works as a management accountant in a book retail organisation that classifies costs as capital and revenue. Which of the following costs should David categorise as being capital costs?
- (i) Repairs to packing machine
 - (ii) Purchase of books for resale
 - (iii) Salaries of retail staff
- A (i) only
 - B (i) and (ii)
 - C (ii) and (iii)
 - D (iii) only
 - E None of the above

(2 marks)

6. An organisation is considering purchasing a new packaging machine, costing RWF1,100,000 in year 0. The annual net cash flows are estimated to be RWF300,000, RWF360,000, RWF395,000 and RWF425,000 in years 1 to 4, respectively. An 8% cost of capital is applied and the discount factors are as follows:

Year 1	0.926
Year 2	0.857
Year 3	0.794
Year 4	0.735

What is the net present value for this investment?

- A RWF112,325
 - B RWF209,325
 - C RWF1,212,325
 - D -RWF380,000
 - E None of the above
7. A company charges depreciation on all its non-current assets on a straight-line basis. A machine bought for RWF6,000,000 has a useful life of 12 years and an annual depreciation of RWF500,000.
- What type of cost is this machine's annual depreciation?
- A Stepped
 - B Semi-variable
 - C Variable
 - D Fixed
 - E None of the above

(2 marks)**(2 marks)**

8. Etienne is responsible for maintaining the company's asset register, including the calculation of depreciation, recording acquisition and disposal of assets to provide information to others in the company.

Which of the following statements is/are true?

- (i) Etienne is concerned with cash receipts and payments
- (ii) Etienne is concerned with income and expenditure
- (iii) Etienne is concerned with income

- A (i) only
 - B (iii) only
 - C (i) and (ii)
 - D (ii) only
 - E None of the above
- (2 marks)**

9. A company makes and sells chairs. Carpenters carve the wood into the correct shapes before the parts are assembled with screws. The chairs are then polished before sale.

Which of the following should be classed as work in progress?

- A Wood just purchased
 - B Chairs waiting to be polished
 - C Screws
 - D Chairs in the shop waiting to be sold
 - E None of the above
- (2 marks)**

10. The production department uses 23,000 machine hours and 6,000 labour hours. The overheads for the production department are RWF88,000,000.

What overhead absorption rate should the production department use?

- A RWF3,826 per machine hour
 - B RWF14,667 per labour hour
 - C RWF5,176 per hour
 - D RWF3,035 per machine hour
 - E None of the above
- (2 marks)**

11. A company purchased a new delivery van at a total cost of RWF45,000,000. The company ordered and obtained the van during July 2019, paying a deposit in cash of RWF6,000,000 in July 2019 with the balance paid in August 2019. Depreciation will be charged at RWF9,000,000 per year after the first full year of use.

How much expenditure would be reported for the van purchase in the year ended 31 July 2019?

- A RWF45,000,000
 - B RWF30,000,000
 - C RWF36,000,000
 - D RWF39,000,000
 - E None of the above
- (2 marks)**

12. A company has budgeted RWF3,200,000 for annual rent. Actual rent was RWF3,350,000.

What is the variance for rent?

- A 4.48% adverse
 - B 4.48% favourable
 - C 4.69% adverse
 - D 4.69% favourable
 - E None of the above
- (2 marks)**

13. The following information has been compiled regarding the paint held as inventory by a decorating company:

Reorder level	900 litres
Minimum usage	30 litres per day
Maximum usage	52 litres per day
Average usage	46 litres per day
Lead time	6 – 10 days (8 day average)

What is the minimum number of litres of paint that the company should hold?

- A 180
 B 340
 C 520
 D 152
 E None of the above **(2 marks)**

14. A company uses last-in first-out (LIFO) to value inventory. At the beginning of June the company had 26 kg of wood held as inventory which had been purchased for RWF20,000 per kg. The inventory movements during June were:

2 June	Purchased 10 kg of wood at RWF21,200 per kg
6 June	Issued 8 kg of wood
23 June	Issued 5 kg of wood

What is the value of the closing inventory at the end of June?

- A RWF460,000
 B RWF472,000
 C RWF487,600
 D RWF467,667
 E None of the above **(2 marks)**

15. Olivier has been asked to cost a specific job using job costing. The job is estimated to use 20 direct labour hours at a cost of RWF600 per hour, 30 kg of material X costing RWF7,500 per kg and 45 kg of material Y costing RWF9,200 per kg. Overheads are absorbed at a rate of RWF350 per direct labour hour.

What is the total cost for this job?

- A RWF651,000
 B RWF639,000
 C RWF651,350
 D RWF658,000
 E None of the above **(2 marks)**

16. Claude works in the Treasury Management Department and has forecasted a cash deficit for the next three months. Claude has been exploring the options for the company to take out a loan. Claude's manager has told him to look for loans where the full amount of the loan remains outstanding for the entire loan period when it is then repaid in full.

What type of repayment terms does Claude need to look for?

- A Balloon
- B Bullet
- C Amortising
- D Flat
- E None of the above

(2 marks)

17. A company plans to manufacture 140 suitcases each month. The direct material costs are budgeted to be RWF23,000 per suitcase. It is expected to take 4 labour hours to make each suitcase at a labour cost of RWF12,000 per hour.

How much is the estimated direct cost to manufacture the budgeted number of suitcases for one year?

- A RWF119,280,000
- B RWF4,900,000
- C RWF9,940,000
- D RWF58,800,000
- E None of the above

(2 marks)

18. Ronald has recently joined the Cost Accounting division of the Accounting Department in a sales company. Ronald will be involved in producing internal reports and providing accurate information to management. Which of the following will management use such information for?

- (i) Planning
- (ii) Control
- (iii) Decision-making

- A (ii) only
- B (i) and (iii)
- C (ii) and (iii)
- D (i), (ii) and (iii)
- E None of the above

(2 marks)

19. What type of receipt or payment would describe the issue of share capital by a company?

- A Revenue receipt
- B Capital payment
- C Capital receipt
- D Disbursement
- E None of the above

(2 marks)

20. A unit cost card has been prepared for the production of one bag as follows:

Direct materials RWF26

Direct labour RWF18

Production overheads RWF8

Non-production overheads RWF22

What is the prime cost?

- A RWF74
 B RWF52
 C RWF44
 D RWF26
 E None of the above **(2 marks)**

21. A company's monthly profit for September has been calculated as RWF1,800,000 using marginal costing and RWF2,200,000 using absorption costing.

If the overhead absorption rate is RWF8,000, what is the movement in inventory during September?

- A Decrease of 50 units
 B Increase of 50 units
 C Increase of 3,200 units
 D Decrease of 3,200 units
 E None of the above **(2 marks)**

22. Jean Damascene prepares exception reports for management highlighting variances that need investigating. The company's policy is to investigate variances exceeding 10%.

Which of the following items should Jean Damascene include in the exception report for management?

	Budget (RWF m)	Actual (RWF m)
Rent	4.2	4.4
Electricity	3.8	4.6
Water	3.6	3.9

- A Rent and water
 B Electricity only
 C Electricity and water
 D Rent only
 E None of the above **(2 marks)**

23. A training company is offering a new course, with estimated variable costs of RWF80,000 and fixed costs of RWF16,000,000. A price of RWF520,000 has been suggested for each person to attend the course. The company expects to have 60 attendees.

What is the minimum number of people the company needs to attend the course in order to at least breakeven?

- A 36
 B 31
 C 60
 D 23
 E None of the above **(2 marks)**

24. Fiduciary duty relates to a duty of care and trust which one person or entity owes to another.

What sort of obligation does fiduciary duty have?

- A Ethical or legal
- B Legal only
- C Ethical only
- D No obligation
- E None of the above

(2 marks)

25. Which method values inventory issued at close to the current market price?

- A Last-in last-out (LIFO)
- B Weighted average pricing
- C First-in first-out (FIFO)
- D Last-in first-out (LIFO)
- E None of the above

(2 marks)

26. Production overheads were budgeted to be RWF96,000,000 but were actually RWF108,000,000. Overheads are absorbed at a rate of RWF640 per machine hour. The number of machine hours was as planned.

What amount of overheads were over or under absorbed?

- A RWF150,000 over absorbed
- B RWF150,000 under absorbed
- C RWF12,000,000 over absorbed
- D RWF12,000,000 under absorbed
- E None of the above

(2 marks)

27. A company estimates cash receipts in October to be RWF26,300,000. In October, the company will make cash payments on wages of RWF12,200,000 and cash payments to suppliers of RWF11,400,000. Cash payments on other expenses in October will be RWF900,000.

What is the net cash flow for October?

- A RWF1,800,000 inflow
- B RWF24,500,000 outflow
- C RWF26,300,000 inflow
- D RWF1,800,000 outflow
- E None of the above

(2 marks)

28. Thomas works as a management accountant and has identified an adverse material price variance of RWF96,000 and a favourable material usage variance of RWF68,400 which he needs to report to the budget holder.

Which of the following are possible reasons that would explain these material variances?

- (i) Unexpected discounts received on material purchased
- (ii) Poorer quality of materials purchased and used
- (iii) Lower grade labour than budgeted used

- A (i) and (ii)
 - B (iii) only
 - C (i) only
 - D (ii) and (iii)
 - E None of the above
-

(2 marks)

29. Cash receipts of RWF2,900,000 were budgeted for April. A favourable variance of RWF300,000 was identified for cash receipts actually received in April.

How much were actual cash receipts in April?

- A RWF2,900,000
- B RWF3,200,000
- C RWF2,600,000
- D RWF3,770,000
- E None of the above

(2 marks)

30. Claude has recently taken over as operational manager, overseeing the manufacturing processes, and is concerned at the extent that machines are breaking down and the impact of this on labour idle time. For the six month period January to June, total budgeted machine hours were 3,200 but actual machine hours were 2,700 due to breakdowns. Total labour hours were 1,300 though 260 of these were recorded as idle.

What is the idle time ratio for the period?

- A 16%
- B 12.5%
- C 20%
- D 5%
- E None of the above

(2 marks)

31. Cissy has recently started working as a trainee in a Management Accounting department and is trying to distinguish between different costing systems that may be used. Which of the following statements are correct?

- (i) Marginal costing includes all production overheads within cost units
- (ii) Absorption costing includes only variable costs in cost units
- (iii) Absorption costing writes off fixed costs as period costs

- A (i), (ii) and (iii)
- B (i) only
- C (ii) and (iii)
- D (i) and (ii)
- E None of the above

(2 marks)

32. A company has used 42,375 budgeted direct labour hours to calculate the pre-determined overhead absorption rate. However, the company has now decided to use machine hours as the base for overhead absorption rate instead. Budgeted overheads are RWF67,800,000 and estimated machine hours are 60,000.

What would be the pre-determined overhead absorption rate per machine hour?

- A RWF1,130
- B RWF1,600
- C RWF0.625
- D RWF0.885
- E None of the above

(2 marks)

33. Dative manages inventory orders and has identified that 56,000 litres of paint are needed each month. Annual holding costs are RWF500 per litre and each order costs RWF3,200.
- Using the Economic Order Quantity model, how many litres of paint should Dative purchase each order?
- A 847
 - B 131
 - C 2,933
 - D 38
 - E None of the above
- (2 marks)**
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34. A company uses time series analysis to forecast income from future sales. The company sells winter sport products, with the majority of sales made during October to March each year.
- Which of the following assumptions is most relevant to predicting accurate cash receipts for this company?
- A The trend is increasing
 - B Interpolation is used
 - C Seasonal variations in past will continue
 - D Additive model must be used
 - E None of the above
- (2 marks)**
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35. Eustache has been asked to calculate some variances to report back to budget holders. Eustache has identified sales for July to December were budgeted to be 8,200 doors but actual sales were 8,460 doors. The selling price was planned to be RWF51,000 per door, but all doors during July to December were actually sold for RWF49,500 each.
- What is the selling price variance for doors for July to December?
- A RWF390,000 adverse
 - B RWF12,300,000 favourable
 - C RWF13,260,000 favourable
 - D RWF12,690,000 adverse
 - E None of the above
- (2 marks)**
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36. Robert is responsible for collection of receivables and has identified that sales revenue for the last financial year was RWF4,100,000, of which cash sales comprised 35%, the remainder being credit sales. Current assets at the end of the year totalled RWF630,000, of which trade receivables were RWF202,000.
- How long is the trade receivables collection period?
- A 17.98 days
 - B 27.67 days
 - C 56.09 days
 - D 86.29 days
 - E None of the above
- (2 marks)**
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37. An organisation budgeted to use 12,800 direct labour hours with overheads expected to be RWF102,400,000 but actually used 14,260 direct labour hours. The organisation uses direct labour hours to absorb overheads and overheads were over absorbed by RWF6,200,000.

How much were the actual overheads?

- A RWF107,880,000
- B RWF108,600,000
- C RWF114,080,000
- D RWF96,200,000
- E None of the above

(2 marks)

38. A company is looking at investing in a new machine which will cost RWF2,100,000 in year 0. The estimated net cash flows in years 1 to 4 are RWF580,000, RWF610,000, RWF630,000 and RWF620,000, respectively.

How long is the payback period for this investment?

- A 4 years
- B 3 years 2 months
- C 3 years 5 months
- D 4 years 5 months
- E None of the above

(2 marks)

39. Josine is a new trainee who has contacted you with a query on costs. She is unsure how administrative labour costs incurred in the course of making a product should be categorised. The costs cannot be traced precisely or in full to a specific product.

What type of cost is this?

- A Direct
- B Overhead
- C Semi-variable
- D Variable
- E None of the above

(2 marks)

40. Solange has identified her company's inventory holding period as 72 days, the trade receivables collection period as 48 days and the trade payables payment period as 61 days.

How long is the cash operating cycle?

- A 59 days
- B 181 days
- C 37 days
- D 109 days
- E None of the above

(2 marks)

41. A company's manufacturing department makes car parts, the assembly department focuses on assembling these car parts, with separate service departments for marketing and sales. The assembly department budgets to use 12,000 direct labour hours and 40,000 machine hours per year.

What basis should the company use for the absorption of production overheads of the assembly department?

- A Consumer cost
- B Sales value
- C Machine hours
- D Direct labour hours
- E None of the above

(2 marks)

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42. A company pays an annual fee of RWF3,000,000 for their supply of electricity and an additional RWF100 per unit of electricity used.

How should the company classify this electricity cost?

- A Fixed
- B Semi-variable
- C Stepped
- D Variable
- E None of the above

(2 marks)

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43. A company budgeted to make 300 tables using 900 labour hours, paying the labourers RWF12,500 per hour. Actually, 1,050 labour hours were used to make 300 tables with labourers paid RWF13,000 per hour.

What is the total direct labour cost variance?

- A RWF450,000 adverse
- B RWF450,000 favourable
- C RWF2,400,000 adverse
- D RWF2,400,000 favourable
- E None of the above

(2 marks)

44. Which of the following is/are advantages of a bank overdraft as a source of finance?
- (i) Long term source of finance
 - (ii) Flexible as can choose to use part of the overdraft facility
 - (iii) Always able to increase overdraft facility if more finance required
- A (i) only
B (ii) only
C (i) and (ii)
D (ii) and (iii)
E None of the above **(2 marks)**
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45. A cash budget has been prepared but needs adjusting as the selling price has been reduced from RWF400,000 to RWF360,000 per unit from 1 April. Sales for April were budgeted to be 80,000 units but are now expected to increase to 86,000 units, due to the reduced selling price. All sales are in cash.
- What are the revised cash receipts from sales in April?
- A RWF34,400,000,000
B RWF32,000,000,000
C RWF28,800,000,000
D RWF30,960,000,000
E None of the above **(2 marks)**
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46. A company's cash budget for the three months ending June has forecasted a deficit closing balance of RWF640,000. The company plans to purchase a new delivery van in May, paying the full purchase price of RWF750,000 in June. Cash receipts and payments for the company are usually relatively stable each month, with all sales and purchases made in cash.
- Which of the following actions should the company consider taking to overcome the forecasted cash deficit?
- A Negotiate a loan or bank overdraft
B Improve credit control procedures for credit sales
C Reduce period of credit taken from suppliers
D Increase proportion of credit sales
E None of the above **(2 marks)**
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47. Etienne works in a factory where he is expected to paint one table every 20 minutes. Etienne earns RWF70,000 each shift which comprises eight working hours but he can earn an extra RWF160 for each minute saved.
- What total earnings would Etienne take home from one shift if he painted 26 tables?
- A RWF70,320
B RWF6,400
C RWF70,160
D RWF76,400
E None of the above **(2 marks)**
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48. Each unit of product M requires 8 kg of material Q. At the end of April, there are 160 units of product M held as inventory and 40 kg of material Q. The company aims to sell 350 of product M during May and hold 150 as inventory at the end of May, along with 20 kg of material Q.

How much material Q does the company need to purchase for May?

- A 2,740 kg
- B 2,700 kg
- C 2,780 kg
- D 2,820 kg
- E None of the above

(2 marks)

49. Leoncie works in the Treasury Management Department and is exploring options for investing the company's surplus funds. Leoncie wants to ensure the company diversifies their investments but is keen to minimise risk.

Which of the following types of investment would offer the lowest risk for Leoncie's company?

- A Equities
- B Unsecured loan
- C Government securities
- D Convertible loan stocks
- E None of the above

(2 marks)

50. A company has two production departments (P1 and P2) and two service departments (S1 and S2). Production overheads have been allocated and apportioned as follows:

P1	RWF8,235,000	S1	RWF2,300,000
P2	RWF6,714,000	S2	RWF2,600,000

S1 does 60% of its work for P1, 30% for P2 and 10% for S2. S2 does 40% of its work for P1 and 60% for P2.

How much are the total overheads for P1 if S1 is apportioned first?

- A RWF10,747,000
- B RWF9,615,000
- C RWF11,313,000
- D RWF8,235,000
- E None of the above

(2 marks)

Total (100 marks)

End of question paper