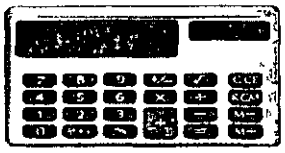
UNIVERSITY EXAMINATIONS



UNIVERSITEITSEKSAMENS

UNISA university of south africa

MAC1501

October/November 2018

Introduction to Management Accounting

Duration 2 Hours

100 Marks

EXAMINATION PANEL AS APPOINTED BY THE DEPARTMENT

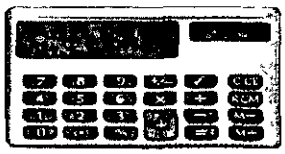
Use of a non-programmable pocket calculator is permissible.

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

[TURN OVER]

UNIVERSITY EXAMINATIONS



UNIVERSITEITSEKSAMENS

UNISA university of south africa

MAC1501

October/November 2018

Introduction to Management Accounting

Duration 2 Hours

100 Marks

EXAMINATION PANEL AS APPOINTED BY THE DEPARTMENT

Use of a non-programmable pocket calculator is permissible

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

This examination question paper consists of EIGHT (8) pages

PLEASE NOTE

a) This examination question paper is available in English only

b) This examination question paper consists of FIVE (5) questions

c) Start each question on a new page in your answer book

d) Show all your calculations

e) Write legibly in only black or blue ink The use of a pencil or any other colour pen is not permitted

f) PROPOSED TIMETABLE (try not to deviate from this)

Question	Topic	Marks	Time (minutes)
1	Multiple-choice questions, based on various learning units	10	12
2	Accounting for and valuation of purchased inventories, payroll accounting	34	40
3	Assignment of overheads and product cost accumulation for inventory valuation and profit calculation	21	26
4	Budgeting	20	24
5	Ratio analyses and interpretation of financial statements	15	18
Total		**100**	**120**

QUESTION 1 (10 marks) (12 minutes)

For each of the following questions, read carefully through the information provided and select only the most correct option as your answer Please list the question numbers below one another, from 1 to 10 with your corresponding answer next to it **For example· 1.(a)**

1 Management accounting is primarily concerned with providing

a) Information to managers inside the organisation as well as information to creditors and other outside stakeholders

b) Information to shareholders, SARS, creditors and banks

c) Information to managers inside the organisation

d) Information to governmental regulatory agencies

(1)

2 In a manufacturing company, direct labour costs combined with direct material costs are known as

a) conversion costs

b) period costs

c) prime costs

d) opportunity costs

(1)

3 Which one of the following items should **not** appear in the cash budget of a company?

a) Sales commission received

b) Depreciation

c) Administrative cost paid

d) Rent paid

(1)

4 Which one of the following is most relevant in assessing the working capital of a company?

a) Debt ratio

b) Return on equity

c) Operating ratio

d) Current ratio

(1)

5 is most appropriate where goods are made according to customer specifications

a) Normal costing

b) Process costing

c) Actual costing

d) Job costing

(1)

6 All of the following, except are external stakeholders of the company

a) the environment

b) shareholders

c) government

d) customers

(1)

7 Unisa's statement "*the African University shaping futures in the service of humanity*" is an example of a

a) goal

b) mission statement

c) objective

d) vision statement

(1)

8 Which one of the following would most likely be included as part of manufacturing overhead in the production of a wooden table?

a) The amount paid to the individual who stains the table

b) The commission paid to the salesperson who sold the table

c) The cost of wood used in the table

d) The cost of glue used in the table

(1)

9 In establishing the value of closing inventory of merchandise for disclosure in the financial statements, all of the following information will be required, except for

a) whether a periodic or perpetual inventory system is used for recording inventory

b) the cost-flow assumption to be adopted

c) the purchase cost of the inventory

d) the number of physical units on hand on the last day of the financial year

(1)

10 Which one of the following costs could contain both variable and fixed cost elements with respect to the production output of the company?

a) Sales commission

b) Direct material

c) Manufacturing overhead

d) Administrative salaries

(1)

[10]

QUESTION 2 (34 marks) (40 minutes)

This question consists of two separate parts, both of which must be answered

PART 2 1 (14)

Orange (Pty) Ltd is a retailer and uses a periodic inventory system The following information relates to the financial year ended 31 July 2018

	R
Sales	1 680 000
Opening inventory of merchandise	140 000
Closing inventory of merchandise	160 000

A mark-up of 20% on cost is applied consistently to establish the selling price

REQUIRED:

2 1 1 Distinguish between the perpetual and periodic inventory systems of a retailer (4)

2 1 2 Calculate the following for Orange (Pty) Ltd

(i) Total purchases for the year

(ii) Gross profit for the year

Hint: To answer question 2 1 2 use the following format (copy it as is to your answer book)

	R	Calculations
Opening inventory		Given
Add Purchases **(i)**		
Available for sale		
Less Closing inventory		Given
Cost of sales		
Sales		Given
Less Cost of sales		
Gross Profit **(ii)**		

(6)

2 1 3 Prepare an adjusting closing journal entry for Orange (Pty) Ltd to record the cost of sales for the year (4)

PART 2 2 (20)

Shades Limited makes eyeglass lenses The company is preparing its labour cost budget for direct labour employees for the forthcoming year

Twenty (20) production workers are currently employed in the production department Budgeted production for the forthcoming year is budgeted at 95 000 units (of eyeglass lenses) Each unit of eyeglass lens requires twenty (20) minutes of manual work and ten (10) minutes of machine operating time performed by each worker The normal wage rate for all production employees is R68 per hour (inclusive both manual and machine operating hours) The duration of the working week is 45 hours (Monday to Friday) and there are 52 weeks in the year The firm is closed for two weeks in the year and no production takes place during this recess period There are 12 public holidays per annum and of which two (2) falls on a Sunday

Each employee enjoys a one-hour lunch every working day plus two weeks' vacation pay for the recess period and two weeks' pay as a bonus Idle time is estimated at 5% of available hours for production

The following compulsory deductions are made from the employees' total wages

PAYE	18% of taxable wages
Pension	8% of normal wages
UIF	1% of total gross wage
Medical aid	3% of normal wages

The following contributions are made by the company

Pension	14% of normal wages (including vacation pay)
UIF	1% of total gross wages
Medical aid	6% of normal wages (including vacation pay)

Should the production time required for the 95 000 units exceed the available time for production, Shade Limited will use the overtime to cover the shortages Overtime is remunerated at one and half (1,5) times the normal rate

REQUIRED:

Calculate the following

2 2 1 Total annual hours available / budgeted for production, for all twenty (20) employees (4½)

2 2 2 The labour recovery rate for one employee (11)

2 2 3 Production time (both manual and machine operating time) required to produce 95 000 units (2)

2 2 4 The anticipated overtime pay for the year, for all twenty (20) employees (2½)

[34]

QUESTION 3 (21 marks) (26 minutes)

This question consists of two separate parts, both of which must be answered.

PART 3.1 (15)

Mbabane Limited has two (2) production departments Assembly and Finishing, and one service department Repairs A predetermined overhead absorption rate is established for each of the production department based on machine hours at normal capacity The overheads of each production department comprise directly allocated expenses and a share of the overheads of the repairs department re-apportioned based on floor space The floor space of the three (3) departments is 225, 375 and 150 square metres (m^2) for Assembly, Finishing and Repairs, respectively All overheads are classified as fixed **(NB Actual overheads incurred in each department were as per budget.)**

The following incomplete production-related information is available concerning the apportionment and absorption of production overheads for a specific period

	Production Departments		**Service department**
	Assembly	**Finishing**	**Repairs**
Budgeted allocated expenses (primary allocation)	R988 965	R946 075	(b)
Budgeted service department apportionment (secondary allocation)	(c)	(a)	
Total budgeted overhead costs	(d)	R1 297 800	-

	Production Departments		Service department
	Assembly	**Finishing**	**Repairs**
Normal machine hours capacity	50 000	(e)	
Overhead absorption rate	(f)	R25,20	
Actual machine hours utilisation	(g)	50 900	
Over/(under) absorbed overheads	R28 800	(h)	

REQUIRED

3 1 1 Calculate the missing figures represented by (a) to (h) **[Show all your calculations]** (11)

3 1.2 Explain what factory capacity means? (2)

3 1 3 Explain cost drivers (2)

PART 3.2 {6}

Madimetja Limited uses a job costing system to measure and trace costs for its fashion clothing The predetermined manufacturing overhead rate has been calculated as R10,00 per direct labour hour worked

	Shirts	**Pants**	**Socks**
Direct materials used	R24 000	R19 000	R23 000
Direct labour cost	R20 000	R14 000	R19 000
Direct labour hours	1 250	850	950

Manufacturing overheads are apportioned based on direct labour hours worked

REQUIRED·

Calculate the total manufacturing costs of the shirts, pants and socks respectively (6)

[21]

QUESTION 4 (20 marks) (24 minutes)

Nozamayedwa (Pty) Ltd manufactures and sells a single product The following information is available for 2018

- Budgeted sales in units are as follows

Quarter	**Units**
1	7 500
2	9 000
3	10 000
4	12 000

- The budgeted selling price per unit is R200
- Production requirements per unit of finished product from quarter 2 onwards are as follows

  Direct labour 3 hours at R60 per hour

  Direct materials 4 kg at R50 per kg

  Variable manufacturing overheads R25 per direct labour hour

  Fixed manufacturing overheads per quarter are estimated at R75 000

- Inventories on hand at the end of quarter 1 were as follows

  Direct materials 4 000 kg at R40 each

  Finished goods 1 500 units at R420 each

- No opening or closing inventory of work-in-process is kept
- The company wishes its closing inventory of finished goods to be equal to 20% of the following quarter's budgeted sales in units from quarter 2 onwards
- The company policy was updated after quarter 1 to state that the closing inventory of direct materials must be equal to 25% of the current quarter's production requirements in kilograms
- The company uses the first-in-first-out (FIFO) method for inventory valuation

REQUIRED

Prepare the following operational budgets for quarter 2 and quarter 3 respectively **(show separate columns for quarter 1 and quarter 3 – no total column is required)**

4 1	Sales budget	(2)
4 2	Production budget (in units)	(4)
4 3	Direct materials budget	(8)
4 4	Direct labour budget	(3)
4 5	Production overheads budget	(3)
		[20]

QUESTION 5 (15 marks) (18 minutes)

Motlalepula Limited financial statements for the years ended 31 December 2017 and 2016 are as follows

Motlalepula Limited

Statement of profit or loss and other comprehensive income

	2017 R	2016 R
Revenue	1 300 000	1 450 000
Cost of sales	(650 000)	(750 000)
Gross profit	650 000	700 000
Administrative expenses	(100 000)	(150 000)
Distribution costs	(50 000)	(100 000)
Operating profit	500 000	450 000
Interest paid	(55 000)	(75 000)
Profit before tax	445 000	375 000
Income tax expense	(133 500)	(112 500)
Net profit for the period	311 500	262 500

Motlalepula Limited

Statement of financial position

	2017 R	2016 R
ASSETS		
Non-current assets		
Property, plant and equipment	2 470 000	2 100 500
Current assets	1 380 000	1 490 000
Inventories	500 000	450 000
Trade receivables	650 000	800 000
Cash and cash equivalents	230 000	240 000
Total assets	**3 850 000**	**3 590 500**

EQUITY AND LIABILITIES	2017 R	2016 R
Issued capital	1 500 000	1 000 000
Accumulated profits	220 000	190 500
Capital and reserves	1 720 000	1 190 500
Non-current liabilities		
Long term loans	1 200 000	1 500 000
Current liabilities	930 000	900 000
Trade payables	300 000	250 000
Short-term (interest-bearing) borrowings	250 000	350 000
Current portion of non-current liabilities	380 000	300 000
Total equity and liabilities	**3 850 000**	**3 590 500**

REQUIRED

5 1 Use the above information to calculate the following ratios for the years ended 31 December 2017 and 2016 respectively

5 1 1 Operating profit margin (2)

5 1 2 Return on assets (2)

5 1 3 Current ratio (2)

5 1 4 Quick ratio (2)

5 1 5 Debt ratio (2)

5 2 Comment on the liquidity of the company (3)

5 3 Briefly discuss the limitations of ratio analyses (2)

[15]

EXAMINATION PANEL AS APPOINTED BY DEPARTMENT

EXAMINERS

FIRST MS SB NTULI
MR SKM SITHOLE

SECOND MS JM VERSTER

© UNISA 2018