AFRICA
UNIVERSITY
(A United Methodist-Related Institution)
"Investing in Africa's Future"

FACULTY OF MANAGEMENT AND ADMINISTRATION

COURSE TITLE: MAC 501 Financial and Management Accounting [EMBA Mutare]

SEMESTER 1: Final Examination November 2016

LECTURER: Mr S.N. Chuchu

TIME: 4 HOURS

INSTRUCTIONS

Answer **all five (5)** questions.

Start **each** question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the question.

Show all your workings.

Credit will be given for logical, systematic and neat presentations.

Question 1

(a) For each one of the following financial ratio classes, outline the objective of financial ratio analysis:

- Profitability ratios
- Activity ratios
- Liquidity ratios
- Financial leverage ratios
- Cash flow ratios
- Investor ratios

[12 marks]

(b) Gemini Limited manufactures and sells Product A. The following data relate to the first six months of 2016:

Sales in units	20 000
Selling price per unit	$25.00
Finished goods inventory in units	2 000

Management is preparing the master budget for the second half-year of 2016. The following additional data are provided:

- The selling price per unit will increase by 20% and the quantity to be sold will decrease by 10%.
- Targeted finished goods closing inventory is 1 500 units.
- The standard cost of producing Product A is $17.75.

Required:
Prepare the following budgets for the second half-year of 2016:
(i) Sales budget **[3 marks]**
(ii) Production budget **[5 marks]**

Question 2

(a) Capricorn Limited's financial year ended on 31 December 2015. On 11 January 2016, it came to light that a trade debtor owing $15 000 and who had been experiencing financial difficulties for a number of months had been declared insolvent.

Required:
Apply the recognition criteria of the conceptual framework for financial reporting to determine how the above conditioned should be treated at 31 December 2015.

[10 marks]

(b) Beta Limited manufactures a single product. The following standard costs relate to the product:

Standard weight of direct material to produce one unit	10 kg
Standard price of direct material per kg	\$20.00
Standard direct labour hours to produce one unit	5 hours
Standard direct labour rate per hour	\$6.00

Actual production and costs for one accounting period were:

Direct material purchased and used	7 800 kg
Direct material cost	\$159 900
Direct labour hours worked	4 200 hours
Wages paid	\$24 150

The actual output was 800 units.

Required:

Calculate:

(i) the material purchase price and usage variances **[5 marks]**

(ii) the labour rate and efficiency variances **[5 marks]**

Question 3

Cancer Limited is a wholesaler. The following trial balance was extracted from its ledger at 31 December 2015:

	Dr	Cr
	\$	\$
Ordinary share capital, \$1 shares		760 000
Share premium		160 000
Retained earnings at 1 January 2015		200 000
Inventory of goods for resale at 1 January 2015	120 000	
Sales of goods		2 000 000
Purchases of goods	1 080 000	
Purchases returns		52 000
Sales returns	56 000	
Carriage outwards	56 000	
Warehouse wages	160 000	
Salaries of sales staff	120 000	
Administrative wages	80 000	
Warehouse plant and machinery, at cost	252 000	
Accumulated depreciation on above asset at 1 January 2015		100 000
Delivery vehicle hire	40 000	
Intangible assets	200 000	
Distribution expenses	20 000	

Administrative expenses	60 000	
Directors' salaries	60 000	
Rent received		32 000
Trade receivables	660 000	
Bank	120 000	
Trade payables		120 000
Land and buildings , at revaluation	340 000	
Revaluation surplus at 1 January 2015		60 000
Financial assets at fair value through OCI	120 000	
Mark-to-market reserve at 1 January 2015		20 000
Deferred tax at 1 January 2015	------	40 000
	3 544 000	3 544 000

Additional information:

1. Inventory of goods for resale at 31 December 2015 was $200 000.
2. Depreciation on warehouse plant and machinery for 2015 was $64 000.
3. Taxable temporary differences at 31 December 2015 were $300 000. Total income subject to income tax in terms of the Income Tax Act was $1 976 000. Allowable deductions amounted to $1 616 000. Assume a tax rate of 25% for all forms of income.
4. Amortization of intangible assets was $20 000.
5. The company issued 10 000 ordinary shares of $1 each at $2 per share during the year ended 31 December 2015.
6. Land and buildings were revalued at $380 000 at 31 December 2015.
7. Fair value of financial assets at fair value through other comprehensive income at 31 December 2015 was $140 000.
8. A dividend of $20 000 was declared on 31 December 2015.

Required:

Prepare the statement of profit or loss and other comprehensive income for the year ended 31 December 2015, to comply with the requirements of IFRS. Classify expenses by function. Notes and comparatives are not required.

Question 4

(a) Delta Limited's projected statement of profit or loss for the coming year is as follows:

	Total	**Per unit**
	$	**$**
Sales	800 000	80
Variable costs	(480 000)	(48)
Contribution margin	320 000	32
Fixed costs	(256 000)	
Operating profit	64 000	

Required:

(i) Compute the break-even point in units. **[2 mark]**
(ii) For the projected level of sales, compute the margin of safety in units. **[2 marks]**
(iii)How many units must be sold to earn a profit of $90 000? **[2 marks]**

(b) Epsilon Limited is a manufacturer of three products, A, B and C. The statement of profit or loss for the year ended 31 December 2015 is as follows:

	Product A	Product B	Product C	Total
	$	$	$	$
Sales	50 000	40 000	60 000	150 000
Variable cost	(30 000)	(25 000)	(35 000)	(90 000)
Contribution margin	20 000	15 000	25 000	60 000
Fixed costs	(17 000)	(18 000)	(20 000)	(55 000)
Profit/(loss)	3 000	(3 000)	5 000	5 000

Management is concerned about the poor performance of Product B. Of the total fixed costs of Product B, $5 000 are direct fixed costs.

Epsilon Limited is considering replacing Product B with Product D, which will use the facilities being currently used by Product B. The sales of Product D would be $50 000 and the product would incur variable costs amounting to $30 000 and direct fixed costs amounting to $6 000 per period. The switch from Product B to Product D would not affect the sales of products A and C.

Required:
Apply relevant costing to determine whether Product B should be replaced with Product D. **[14 marks]**

Question 5

The following are the financial statements of Sigma Limited:

Statement of profit or loss and other comprehensive income for the year ended 31 December 2015

	$
Revenue	1 156 000
Cost of sales	(866 000)
Gross profit	290 000
Other income	85 000
Distribution costs	(47 000)
Administrative expenses	(81 000)
Other expenses	(29 000)
Finance costs	(55 000)

Profit before tax	163 000
Income tax expense	(24 000)
Profit for the year	139 000
Other comprehensive income	175 700
Property revaluation - gain arising during the year	251 000
Tax expense ($251 000 x 30%)	(75 300)
Total comprehensive income for the year	314 700

Statement of financial position as at 31 December 2015

	2015 $	2014 $
ASSETS		
Non-current assets	1 369 000	902 000
Property, plant and equipment	1 023 000	600 000
Intangible assets	277 000	234 000
Available-for-sale investments	69 000	68 000
Current assets	708 000	502 000
Inventories	246 000	128 000
Trade receivables	460 000	353 000
Short-term investments	-------	20 000
Cash in hand	2 000	1 000
Total assets	2 077 000	1 404 000
EQUITY AND LIABILITIES		
Equity	767 700	427 000
Ordinary share capital	317 000	267 000
Share premium	159 000	134 000
Revaluation surplus	175 700	-------
Retained earnings	116 000	26 000
Non-current liabilities	834 300	557 000
Debentures	756000	555 000
Deferred tax	78 300	2 000
Current liabilities	475 000	420 000
Trade payables	244 000	311 000
Tax payable	42 000	25 000
Dividend payable	49 000	22 000
Bank overdraft	140 000	62 000
Total equity and liabilities	2 077 000	1 404 000

Additional information:

1. Other income comprises interest received of $79 000 and profit on disposal of an item of property, plant and equipment. The item of property, plant and equipment had a carrying amount of $244 000 and was sold for $250 000 during 2015.
2. Other expenses comprise depreciation on property, plant and equipment amounting to $22 000 and amortization on intangible assets amounting to $7 000.
3. Current tax expense for the year ended 31 December 2015 was $23 000.

4. Land and buildings were revalued on 31 December 2015, resulting in a revaluation surplus of $251 000.
5. Short-term investments are highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value. The short-term investments were sold for $20 000 during 2015.
6. The company declared a dividend amounting to $49 000 at 31 December 2015.

Required:

Prepare the statement of cash flows for the year ended 31 December 2015. Comparatives and notes are not required. Use the indirect method. **[20 marks]**

END OF PAPER