WOMEN'S UNIVERSITY IN AFRICA

Addressing gender disparity and fostering equity in University Education

FACULTY OF MANAGEMENT AND ENTREPRENEURIAL SCIENCES

BSc HONOURS DEGREE IN MANAGEMENT AND ENTREPRENEURIAL DEVELOPMENT STUDIES SPECIALISING IN BANKING AND FINANCE

BACHELOR OF ACCOUNTING SCIENCE HONOURS DEGREE

MAIN PAPER

BMF221: **MANAGEMENT ACCOUNTING**

BAS111: **COSTING AND MANAGEMENT ACCOUNTING**

INTAKE 25: **SECOND YEAR SECOND SEMESTER**

INTAKE 13: **FIRST YEAR FIRST SEMESTER**

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

Answer **Question 1** and any other two.

Question 1

Dispensation Ltd manufactures two products, Standard and Deluxe. Each product requires the incorporation of a difficult-to-handle special part (one of them for a standard and four for a deluxe). Both of these products are made in batches (large batches for Standard and small ones for Deluxes). Each new batch requires that the production facilities are 'set up".

Details of the two products are:

	Standard	**Deluxe**
Annual sales units	12 000	12 000
Sales price per unit	65	87
Batch size units	1000	50
Direct labour rate per hour	8	8
Direct material cost per unit	22	32
Number of special parts/ unit	1	4
Number of set ups/batch	1	3
Number of separate issues from stores/batch	1	1
Number of sales invoices issued per year	50	240

In recent months, Dispensation Ltd has been trying to persuade customers who buy the standard to purchase the deluxe instead. An analysis of overhead costs for Dispensation Ltd has provided the following information.

Overhead analysis	**$**	**Cost driver**
Set up costs	73 200	Number of set ups
Special part handling costs	60 000	Number of special parts
Customer invoicing costs	29 000	Number of invoices
Material handling costs	63 000	Number of batches
Other overheads	108 000	Labour hours

Required:

a) Calculate the profit per unit and the return on sales for Standard and Deluxe using:
   i). The traditional direct- labour- hour based absorption of overheads. [15]
   ii). Activity-based costing methods [20]

b) Comment on the managerial implications for Dispensation Ltd of the results in (a) above. [5]

Question 2

Sunway Ltd is a wholesale business. The budgeted income statements for each of the next six months are as follows:

	Jan	**Feb**	**Mar**	**April**	**May**	**Jun**
	$000	**$000**	**$000**	**$000**	**$000**	**$000**
Sales revenue	52	55	55	60	55	53
Cost of goods sold	30	31	31	35	31	32
Salaries and wages	10	10	10	10	10	10
electricity	5	5	4	3	3	3
depreciation	3	3	3	3	3	3
Other overheads	2	2	2	2	2	2
Total expenses	50	51	50	53	49	50
Net profit	2	4	5	7	6	3

The business allows all of its customers one month's credit. Sales revenue during December totalled $60 000. The business plans to maintain inventories at their existing level until sometime in March, when they are to be reduced by $5 000. Inventories will remain at this lower level indefinitely. Inventory purchases are made on one month's credit. December purchases totalled $30 000. Salaries, wages and 'other overheads' are paid in the month concerned. Electricity is paid quarterly in arrears in March and June. The business plans to buy and pay for a new delivery van in March. This will cost a total of $15 000, but an existing van will be traded in for $4 000 as part of the deal. The business expects to have $12 000 in cash at the beginning of January

Required:

Prepare the Cash Budget for the six months ending in June. [20]

Question 3

The following information relates to an entity which produces and sells a single product.

Annual fixed cost	=	$120 000
Selling price/unit	=	$ 40
Variable Cost/Unit	=	$ 20
Sales	=	$8 000 units

Required

(i) Calculate the breakeven point in units and in value [5]

(ii) Calculate the number of units to earn to a profit of $60 000 [3]

(iii) Determine the selling price to earn a profit of $60 000 from existing sales [3]

(iv) Calculate additional sales volume to meet $16 000 additional fixed costs. [3]

(v) Compute the profit volume ratio and interpret it [4]

(vi) Determine margin of safety and interpret it [2]

Question 4

An investment project has the following expected cash flows over its economic life of three years:

	($)
Year 0	(142 700)
1	51 000
2	62 000
3	73 000

Required:

(a) Calculate the net present value (NPV) of the project at discount rates of 0%, 10% and 20% respectively. [12]

(b) Draw a graph of the project NPVs calculated in (i) and use the graph to estimate, and clearly indicate, the project internal rate of return (IRR) to the nearest integer percentage

[8]

Question 5

The following information relates to a Co for a 6 months period

	Jan	Feb	Mar	Apr	May	June
Units sold	150	120	180	150	140	160
Units produced	150	150	150	150	170	140

The following is also provided

Selling Price/Unit	$20
Variable Cost/Unit	12
Fixed Manufacturing O/Head for each period	$600

Normal activity is expected to be $150 units/period (OH absorption based)

Fixed Non-Manufacturing O/Heads $200/period

Required

Prepare income statements for the first quarter under

a) Marginal Costing; and [10]

b) Absorption Costing. [10]

Question 6

A firm operates a process, the details of which for the period were as follows. There was no opening work-in-progress. During the period 8250 units were received from the previous process at a value of $453 750, labour and overheads were $350 060 and material introduced was $24 750. At the end of the period the closing work-in-progress was 1600 units, which were 100% complete in respect of materials, and 60% complete in respect of labour and overheads. The balance of units were transferred to finished goods.

Required

a) Calculate the number of equivalent units produced. [5]

b) Calculate the cost per equivalent unit. [2]

c) Prepare the process account. [8]

d) Distinguish between joint products and by-products, and briefly explain the difference in accounting treatment between them. [5]

END