AC424 (M) DECEMBER 2017

UNIVERSITY OF SWAZILAND

DEPARTMENT OF ACCOUNTING

MAIN EXAMINATION PAPER DECEMBER 2017

DEGREE/ DIPLOMA AND YEAR OF STUDY	:	B. COM IV
TITLE OF PAPER	:	Advanced Managerial Accounting1
COURSE CODE	:	AC424
TOTAL MARKS	:	100 MARKS
TIME ALLOWED	:	THREE (3) HOURS
INSTRUCTIONS	1	There are four (4) questions, answer all.
	2	Begin the solution to each question on a new page.
	3	The marks awarded for a question are indicated at the end of each question.
	4	Show all the necessary workings.
	5	Round off as you deem appropriate.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

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SPECIAL REQUIREMENTS: CALCULATOR

QUESTION 1

A division of Boveri Manufacturing Company has two departments, assembly and finishing departments. The division purchases components to manufacture two finished products, Regular product and Deluxe product; which are sold to external customers. The division's budgeted unit sales and prices for month 9 of the coming year are as follows:

Divisional Sales Budget for month 9 of the coming year

Product	Units	Price
Regular product	34,000	E50.00
Deluxe product	58,000	E30.00

Finished goods closing inventory budgeted for the end of month 9, is 100 units of Regular product and 2,000 units of Deluxe product. There is no opening inventory of finished goods at the beginning of month 9.

The direct material components C3 and C4 are used to produce Regular and Deluxe products in the quantities shown in the table below. The company holds no inventory of components C3 and C4, as it has a just-in-time delivery arrangements.

	Component			
Product	**C3**	**C4**		
Regular product (per unit) needs	8 units	4 units		
Deluxe product (per unit) needs	4 units	3 units		
Price per unit of component	E1.25	E1.80		

Direct labour requirements, direct labour rates and budgeted monthly manufacturing overhead costs for the assembly and finishing departments for month 9 are given below:

Product	**Assembly**	**Finishing**
Regular product direct labour time per unit	30 minutes	12 minutes
Deluxe product direct labour time per unit	15 minutes	10 minutes
Labour rate	E10.00	E12.00
Manufacturing overhead cost for the month	E617, 500	E204,000

Every month a predetermined direct labour hour overhead rate is calculated in each department for manufacturing overhead and applied to finished products produced in that department.

Required:

(a)Prepare summaries of the following budgets for month 9:
(i) Budgeted sales (units and value) (2 marks)
(ii) Budgeted production (units) (2 marks)

(iii) component purchase and usage (units and value) (6 marks)
(iv) direct labour (hours and value) (6 marks)
(v) departmental manufacturing overhead rates (4 marks)

(b) Comment on B Ltd's treatment of manufacturing overheads, i.e. computing a monthly overhead rate, compared to a predetermined overhead rate prepared annually.

(5 marks)

(Total 25 marks)

QUESTION 2

(a) (i) Can direct materials ever be irrelevant in a make-or-buy decision? Explain. (4 marks)

(ii) Explain why knowledge of cost structure or behavior of each item in a budget, i.e. the variable cost per unit and the total fixed costs, is useful to management. (4 marks).

(iii) Jason travels to work by train to his five-day-a-week job. Instead of buying daily tickets he finds it cheaper to buy a quarterly season ticket which costs E188 for 13 weeks.

Mary, his neighbor, who also makes the same journey, suggests that they both travel in Jason's car and offers to give him E120 each quarter towards his car expense. Except for weekend travelling and using it for local college attendance near his home on three evenings each week to study for his accounting professional examinations, Jason's car remains in his garage the rest of the time.

Jason estimates that using his car for work would involve him in the following expenses each quarter:

Depreciation (proportion of annual figure)	200
Petrol and oil	128
Tyres and miscellaneous	52

You are required to state whether Jason should accept Mary's offer based on a statement which justifies your answer and indicate which expenses are relevant and which are not.

(7 marks)

(b) A company manufacturing T-shirts, with a financial year 1 September to 31 August prepared a sales budget which resulted in the following cost structure:

		% of sales
Direct materials		32
Direct wages		18
Variable production overhead		6
Variable administrative and selling expenses		3
Fixed production overhead		30
Fixed administrative and selling expenses		8.75
Profit		2.25

After 10 weeks, it became obvious that the sales budget was too optimistic and it has now been estimated that because of a reduction in sales volume, for the full year, sales will total E2,560,000.

You are required to present a statement for management showing the amended sales and operating costs, using the relationship in percentages of sales revenue represented by each line of the income statement and showing the total contribution. Assume fixed production overhead and administrative and selling overheads are 30% and 8.75% of the revised sales; respectively.

(10 marks)

(Total 25 Marks

QUESTION 3

Bamburi Ltd produces fancy bags and has budgeted production of 4,500 fancy bags with the following amounts:

Variable costs of production:	
Direct materials	3 pounds @ E1.30 per pound
Direct labour	0.5 hour @ E18.00 per hour
Variable overhead	0.5 hour @E3.40
Fixed overhead:	
Materials handling	E6,200
Depreciation	E2,600

At the end of the year, Bamburi Ltd had the following actual costs for production of 4,700 fancy bags:

Direct materials	E18,320
Direct labour	42,400
Variable overhead	7,900
Fixed overhead:	
Materials handling	8,800
Depreciation	4,350

Required:

(i) Calculate the budgeted amounts for each cost category listed above for the 4,500 budgeted fancy bags. (5 marks)

(ii) Prepare a performance report using a budget based on expected (budgeted) production of 4,500 fancy bags. (7.5 marks)

(iii) Prepare a performance report using a budget based on the actual level of production of 4,700 fancy bags (7.5 marks)

(iv) Explain why the performance report prepared in (ii) above may be of little value (5 marks)

Total (25 Marks)

QUESTION 4

(a) Explain how the NPV and the IRR are used to determine whether a project should be accepted or rejected. (4 marks)

(b) Why is NPV is generally preferred over IRR when choosing among competing or mutually exclusive projects.

(6 marks)

(c) JBC Ltd is considering a new process designed to improve environmental performance. On the negative side, the process requires a new equipment and some working capital. The equipment will cost E1,200,000, and its cash operating expenses will total E270,000 per year. The equipment will last for 7 years but will need a major overhaul costing E120,000 at the end of the fifth year. At the end of 7 years, the equipment will be sold for E96,000. An increase in working capital totaling E120,000 will also be needed at the beginning. This working capital will be recovered at the end of the 7 years.

On the positive side, JBC Ltd estimates that the new process will save E400,000 per year in environmental costs (fines and cleanup costs avoided). The cost of capital is 12%.

Required:

1. Prepare a schedule of cash flows for the proposed project. (*Note*: assume there are no income taxes.) (7 marks)
2. Compute the NPV of the project. Should the new project design be accepted using an economic feasibility criteria? (8 marks)

(Total 25 Marks)