

AC424 (S) JULY 2018

UNIVERSITY OF SWAZILAND  
DEPARTMENT OF ACCOUNTING  
SUPPLEMENTARY EXAMINATION PAPER JULY 2018

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) How are budgets used to control? ( 2 marks)

Peanut Land Inc. produces all-natural organic peanut butter. The peanut butter is sold in 12-ounce jars. The sales budget for the first 4 months of the year is as follows:

Month	Unit Sales	Dollar Sales (€)
January	36,000	108,000
February	38,000	114,000
March	41,000	123,000
April	43,000	129,000

Company policy requires that ending inventories for each month be 25% of next month's sales.

At the beginning of January, the inventory of peanut butter is 9,300 jars.

Each jar of peanut needs two raw materials: 24 ounces of peanuts and one jar set (a glass jar and lid). Company policy requires that ending inventories of raw materials for each month be 10% of the next month's production needs. That policy was met on January 1.

Required:

1. Prepare a production budget for the first quarter of the year. Show the number of jars that should be produced each month as well as for the quarter in total. (7 marks)
2. Prepare separate direct materials purchases budgets for jars and for peanuts for the months of January and February. ( 16 marks)

**(Total: 25 Marks)**

## QUESTION 2

Ocean Cuisine, a restaurant chain in Swaziland, needs to determine if it would be cheaper to produce 5,000 units of its main food ingredient for use in its restaurants or to purchase them from an outside supplier for E12 each. Cost information on internal production includes the following:

	Total Cost	Unit Cost
Direct materials	E25,000	E5.00
Direct labour	15,000	3.00
Variable manufacturing overhead	7,500	1.50
Variable marketing overhead	10,000	2.00
Fixed plant overhead	<u>30,000</u>	<u>6.00</u>
Total	<u>E 87,500</u>	<u>E 17.50</u>

Fixed overhead will continue whether the ingredient is produced internally or externally. No additional costs of purchasing will be incurred beyond the purchase price.

Required:

1. What are the alternatives for Ocean Cuisine? (.5 marks)
2. List the relevant cost(s) of internal production and of external purchase. (6 marks)
3. Which alternative is more cost effective and by how much? (10 marks)
4. Now assume that 20% of the fixed overhead can be avoided if the ingredient is purchased externally. Which alternative is more cost effective and by how much? (8.5 marks)

**(Total: 25 Marks)**

### QUESTION 3

In this question there are 4 (a-d) independent scenarios and after tax cash flows are to be assumed.

- (a) KD Ltd is considering investing in one of the following two independent projects. Either project will require an investment of E20,000. The expected cash flows for the two projects follow.

Year	Project A	Project B
1	E6,000	E6,000
2	8,000	8,000
3	10,000	10,000
4	10,000	3,000
5	10,000	3,000

- (b) Wilma Golding is retiring and has the option to take her retirement as a lumpsum of E450,000 or to receive E30,000 per year for 20 years. Wilma's required rate of return is 6%.
- (c) David Booth is interested in investing in some tools and equipment so that he can do independent drywalling. The cost of the tools and equipment is E30,000. He estimates that the return from owning his own equipment will be E9,000 per year. The tools and equipment will last 6 years.
- (d) Patty Fuller is evaluating what appears to be an attractive opportunity. She is currently the owner of a small manufacturing company and has the opportunity to acquire another small company's equipment that would provide production of a part currently purchased externally by her small manufacturing company. She estimates that the savings from internal production of the part will be E75,000 per year. She estimates that the equipment will last 10 years. The owner is asking E400,000 for the equipment. Her company's cost of capital is 8%.

Required:

1. What is the payback period for each of KD Ltd's projects? If rapid payback is important, which project should be chosen? Which would you choose? ( 9 marks)
2. Which of KD Ltd's projects should be chosen based on the ARR? Explain why IRR performs better than the payback period in this setting. (6 marks)
3. Assuming Wilma Golding will live for another 20 years, should she take the lumpsum or the annuity? ( 2 marks).
4. Assuming a required rate of return of 8% for David Booth, calculate the NPV of the investment. Should David invest? ( 4 marks)
5. Calculate the IRR for Patsy Fuller's project. Should Patsy acquire the equipment? ( 4 marks)

**(Total: 25 Marks)**

#### QUESTION 4

(a) Time and effort can be wasted if all variances are investigated. Identify and explain 5 factors to take into account when investigating variances. (15 marks).

(b) Chau Plastics manufacturers to produce one type of product. Budgeted sales and output are 1,000 units per month for the current year. The standard unit cost card included:

Direct material: (5 kg @ E20 per kg) E 100

The company has just completed month six of its operations, and extracts from its records revealed that 1,200 units were produced and sold, and the actual direct materials purchased and used were 6,300 kg costing E132,300.

The managing director has discovered that a shortage of materials had caused the market price to rise to E23 per kg.

Required:

1. Identify the important figures to take into account in calculating direct material variances (2 marks).
2. Calculate for the direct material:
  - (i) the total material variance (2 marks)
  - (ii) the planning variance (2 marks)
  - (iii) the two operational variances (4)

**(Total 25 Marks)**