UNIVERSITY OF JOHANNESBURG

Department of Commercial Accounting

FINANCIAL PLANNING AND CONTROL 3B
BFA44B4

SUPPLEMENTARY ASSESSMENT OPPORTUNITY

January 2018

Time: 3 hours **Marks: 100**

Assessor: MR K DALY
Internal Moderator: MS M JANSE VAN RENSBURG
External Moderator: MR J BADENHORST

INSTRUCTIONS:
This paper consists of 5 pages including the cover page and 4 annexures.

- **Answer all questions**
- Show all calculations, workings and reasoning clearly
- Silent, non-programmable calculators may be used
- **HAND IN THIS QUESTION PAPER**

Question	Topic	Marks	Time
1	Functional Budgets	25	45 minutes
2	Cash Budget	25	45 minutes
3	Flexible Budget	25	45 minutes
4	Capital Budgeting	25	45 minutes
		100	**180 minutes**

Question 1 (25 marks)

Prodplan Ltd plans to sell 10 000 units during the period 1 October 2017 to 31 December 2017.

Additional information is given below:

1. Inventory levels are as follows:

	30 September 2017	31 December 2017
Completed products	1 000 units	2 000 units
Raw material X	10 000 kg	5 000 kg
Raw material Y	8 000 kg	10 000 kg

2. All inventory is issued according to the FIFO method.
3. Three labour hours are needed to manufacture one completed unit. Workers earn R20 per hr.
4. The cost of raw material X is R1.35 per kg and raw material Y is R0.50 per kg.
5. Two kg of raw material X and three kg of raw material Y are required for the production of one unit of the finished product.
6. Manufacturing overhead costs are allocated at a rate of R6 per direct labour hour.
7. Finished products are sold at R150 per unit.

Required:

Prepare each of the following budgets for Prodplan Ltd for the period ended 31 December 2017:

1.1	The sales budget	(1 mark)
1.2	The production budget	(3 marks)
1.3	Direct material purchases budget	(8 marks)
1.4	Direct labour budget	(2 marks)
1.5	Cost per unit and closing inventory budget	(5 marks)
1.6	Cost of goods manufactured and sold budget	(6 marks)
		(25 marks)

Question 2 (25 marks)

The following information was extracted from the records of QBee (Pty) Ltd:

	October R	November R	December R
Sales (75% cash)	900 000	800 000	750 000
Purchases (25% cash)	400 000	440 000	500 000
Salaries and wages	140 000	140 000	280 000
Overhead expenses	120 000	140 000	150 000

Additional information:

1. The opening bank balance on 1 October 2017 is expected to be an overdraft of R380 000.
2. Credit sales are collected as follows:
   50% in the month following the month of sale;
   45% in the 2nd month following the month of sale.
   5% will prove to be irrecoverable.
3. Credit sales were R550 000 in August and R600 000 in September 2017.
4. Credit purchases are paid in the month following purchase less a 2% settlement discount.
5. Creditors for purchases at 1 October 2017 are:
   for September purchases R260 000.
6. Overhead expenses include a monthly depreciation charge of R20 000. Overhead expenses are paid in the month following the month in which they are incurred.
7. Creditors for overhead expenses at 1 October 2017 are:
   for September overheads: R120 000.
8. A provisional tax payment of R155 000 must be made at the end of December 2017.
9. A new motor vehicle will be bought in October 2017 for R260 000. A deposit of R60 000 will be paid in October. Monthly instalments of R6 000 must be paid for 36 months from the end of November 2017.
10. A dividend of R35 000 from shares in another company will be received in December 2017.

Required:

Prepare a cash budget for October, November and December 2017.

(25 marks)

Question 3 (25 marks)

Value Products Ltd has recently introduced budgeting as an integral part of its corporate planning process. The company's first effort at constructing a flexible budget for manufacturing overhead is shown below:

Percentage of capacity	80%	100%
Machine-hours	4 800	6 000
	R	R
Maintenance	1 480	1 600
Supplies	1 920	2 400
Utilities	1 940	2 300
Supervision	3 000	3 000
Machine setup	960	1 200
Total manufacturing overhead cost	R9 300	R10 500

The budgets above are relevant over a range of 80% to 100% of capacity. The managers who will be working under these budgets have control over both fixed and variable costs. The company applies manufacturing overhead to products on the basis of standard machine-hours.

Required:

3.1 Redo the company's flexible budget, presenting it in better format. Show the budget at 80%, 90%, and 100% levels of capacity. (Use the high-low method to separate fixed and variable costs.) (12½ marks)

3.2 The company operated at 95% of machine-hour capacity during October. Actual overhead costs incurred were:

	R
Maintenance	2 083
Supplies	3 420
Utilities	2 666
Supervision	3 000
Machine setup	855
Total overhead cost	R12 024

The fixed costs had no budget variances. Prepare an overhead performance report for October. Structure your report so that it shows only a spending variance for overhead. You may assume that the master budget for October called for an activity level during the month of 6 000 machine-hours. (12 ½ marks)

(25 marks)

Question 4 (25 marks)

CeramiTile (Pty) Ltd is a manufacturer of ceramic tiles and has decided to renew outdated production machinery at one of its plants. The current machinery cost R600 000 five years ago and has a current scrap value of R40 000.

The following replacement option is possible:

New Machine:	
Estimated life	6 years
Initial cost (payable immediately)	R1 640 000
Net cash inflows:	
Year 1	R130 000
Year 2	R130 000
Year 3	R380 000
Year 4	R450 000
Year 5	R820 000
Year 6	R1 040 000

The company's cost of capital is 12%.

Required:

4.1 Calculate:

the payback period; and (3 marks)

the internal rate of return of the replacement machine. (20 marks)

4.2 Assuming that Ceramitile (Pty) Ltd normally requires a payback period of 4 years or less in order to invest in new machinery, advise CeramiTile (Pty) Ltd as to whether they should purchase the new machine or not. Motivate your answer. (2 marks)

(25 marks)

[100 marks]

END OF PAPER