FACULTY/COLLEGE	College of Business and Economics
SCHOOL	School of Accounting
DEPARTMENT	Financial Management
CAMPUS(ES)	APK
MODULE NAME	Performance Management
MODULE CODE	ADFM005/ S3PFMQ6
SEMESTER	Second Semester
ASSESSMENT OPPORTUNITY, MONTH AND YEAR	Final Assessment Opportunity November 2019

ASSESSMENT DATE	15 November 2019	**SESSION**	08:30 – 11:30
ASSESSOR(S)	Ms T.G Ramutumbu Ms N. Kamsenza		
MODERATOR(S)	Ms T.G Nharo Mr T. Fusire		
DURATION	3hours (180 min)	**TOTAL MARKS**	120

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)	13

INFORMATION/INSTRUCTIONS:

- This is a closed-book assessment.
- Read the questions carefully and answer only what is required.
- Number your answers clearly and correctly as per the question paper.
- There are 3 sections and must all be answered in the booklets provided.
- Ensure that you scratch out empty spaces in order to be eligible for a remark.
- Ensure that you hand in all the answer books and question paper at the end of assessment.
- Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.

SECTION A

The following information relates to questions 1.1 -1.5:

Mali (Pty) Ltd manufactures two products, Tim and Baktu. Management believes that using activity-based costing (ABC) will yield numerous benefits for the entity. They have decided that they would use ABC to determine the maintenance costs that will be applied to each unit of production. The maintenance costs for the following year are R3 000 000. A detailed analysis of the maintenance functions on an activity base revealed the following:

	% of cost	**Tim**	**Baktu**
Scheduled visits	50	6 visits	4 visits
Call-out visits	40	15 visits	5 visits
Rework hours	10	1 200 hours	300 hours

The budgeted units of production are 120 000 units of Tim and 80 000 units of Baktu for the year.

Question 1.1

The portion of the maintenance costs that is attributable to **scheduled visits** is:

A. R3 000 000
B. R1 500 000
C. R1 200 000
D. R1 800 000

(2)

Question 1.2

Using ABC, the percentage of the maintenance costs for **call-out visits** that will be allocated to all units of Tim is:

A. 75%
B. 40%
C. 30%
D. 15%

(2)

Question 1.3

Using ABC, the maintenance costs for **call-out visits** that will be allocated to each unit of Baktu is:

A. R15.00
B. R11.75
C. R2.50
D. R3.75

(2)

Question 1.4

Using ABC, the maintenance costs for **rework hours** that will be allocated to each unit of Tim is:

A. R3.75
B. R2.00
C. R0.75
D. R0.50

(2)

Question 1.5

Which statement is true for Mali Ltd's maintenance costs:

A. Tim carries higher maintenance costs per unit than Baktu.
B. The total costs attributable to Tim's scheduled and call-out visits are the same.
C. 68% of the maintenance costs are attributable to Tim.
D. Statements A, B and C are true.

(2)

Question 1.6

Your company supplies a particular product to customers X and Y. The product has a list price of $40 with a mark-up of 100%.
As Y buys in bulk it receives a discount of 10% for every order of 100 units or more. However, X obtains a discount of 15% whatever the size of the order as it collects the items, thereby saving your company any distribution costs.
The administration cost per order is $40 and distribution costs are $800 per order.

X places 10 orders in the year totalling 400 units, and Y places 5 orders for 100 units each.
Choose which your most profitable customer is.

A. Y
B. X
C. They will be equal amounts
D. Not enough information was provided

(2)

Question 1.7

Which one of the following are support activities in the value chain will a company consider if they wanted to make sure their employees are well trained?

A. Human resource management.
B. Manufacturing.
C. Procurement.
D. Operations .

(2)

Question 1.8

Which of the following are included within activity based management (ABM)?

(a) Cost reduction
(b) Product design decisions
(c) Variance analysis
(d) Operational control
(e) Performance evaluation

A. (a) only
B. (a), (c), (d) and (e)
C. (c), (d) and (e)
D. (a), (b), (d) and (e)

(2)

Question 1.9

A company has developed a new product which it will launch next month. During the initial production phase, the company expects to produce 64 batches of the product. The 1st batch is expected to require 25 hours of direct labour and the cost of labour is R10 per hour.

A 90% learning curve is expected to apply and the learning index for a 90% learning curve is -0.1520.

What is the labour cost of the 64 batches to the nearest R?

A. R8 503.
B. R6 826.
C. R8 906.
D. R4 675

(2)

Question 1.10

Considering the following statements, which of the following definitions is/are correct?
1. An imposed budget is a budget which, by recognising different cost behaviour patterns, is designed to change as the volume of activity changes

2. Bottom-up budgeting is a process where all budget holders have the opportunity to participate.

A. Neither are correct
B. Definition 2 only is correct
C. Definition 1 only is correct
D. Both definitions are correct

(2)

The following scenario relates to questions 1.11 and 1.12.

XYZ Pty (Ltd) is a computer component manufacturer. Due to health and safety regulations, one of its processes can only be operated 8 hours a day. The hourly capacity of this process is 500 units per hour. The selling price of each component is R50 and the unit material cost is R20. The daily total of all factory costs (conversion costs) is R72 000, excluding materials. Expected production is 3 600 units per day.

Question 1.11

Using the above information, calculate the return per factory hour.

R________________ per factory hour.

(2)

Question 1.12

Using the above information, calculate the throughput accounting ratio. Round your answer to two decimal places.

_________________. **(2)**

Question 1.13

S has several sales teams, each of whom is allocated a specific territory. S has used traditional budgeting techniques in the past to provide targets and to motivate sales staff. The sales director is considering switching to a beyond budgeting approach.
Which of the following are potential benefits of beyond budgeting?

Select ALL that apply.

A. Coordination between sales and production will improve
B. There will be less scope for budget slack
C. Sales staff will be better motivated
D. Coordination and cooperation will increase across the sales department
E. Less time will be spent on budgeting

(2)

Question 1.14

A division of a service company is aware that its recent poor performance has been attributable to a low standard of efficiency amongst the workforce, compared to rival firms. The company is adopting a balanced scorecard approach to setting performance targets. As part of its objective of closing the skills gap between itself and rival companies, the division's management has set a target of providing at least 40 hours of training each year for all its employees.

This is a performance target that reflects:

A. A finance perspective.
B. An internal process perspective.
C. A learning and growth perspective.
D. A customer perspective.

(2)

Question 1.15

A company is considering four capital projects in which to invest. All of the projects are divisible, which means that if the company invests in a fraction of a project, it will earn that fraction of the expected returns. Information about the projects is as follows:

	Project 1	Project 2	Project 3	Project Z
Cash flows	$	$	$	$
Year 0	(10 000)	(8 000)	(18 000)	(17 000)
Year 1	3 000	7 000	0	0
Year 2	6 000	5 000	18 000	27 000
Year 3	8 000	3 000	15 000	–
Year 4	8 000	2 000	1 000	–
PV of annual cash profits	17 340	13 200	24 500	25 860

If there is capital rationing in Year 0, and none of the project start times can be delayed beyond year 0, how would the four projects be ranked in order of priority, starting with the most desirable project first?

A. W, X, Y then Z
B. W, X, Z then Y
C. X, W, Z then Y
D. Z, Y, W then X

Question 1.16

Helen Ltd has budgeted the following results for the year:

Sales Units	Probability
20,000	0.2
30,000	0.5
40,000	0.3

Sales price per unit is R20. Variable costs per unit are budgeted as follows.

Costs R	*Probability*
12 0	1
14 0	6
16 0	3

Fixed costs will be R175,000.

What is the probability that Helen will make a loss?

(Answer must be written in the answering booklet)

Question 1.17

Which of the following statements best explains the difference between market skimming and penetration pricing?

A. Penetration pricing is a strategy that is often used in the decline phase of a product's life cycle whereas market skimming is a strategy that is mainly used in the introduction phase of the product life cycle.
B. Market skimming is a strategy that is often used in the decline phase of a product's life cycle whereas penetration pricing is a strategy that is mainly used in the introduction phase of the product life cycle.
C. Penetration pricing is a policy of charging high prices when the product is first launched in order to obtain sufficient penetration in the market whereas market skimming is a policy of charging low prices when a product is first launched and attracting customers through heavy advertising and sales promotion.
D. A strategy of penetration pricing could be effective in discouraging potential new entrants to the market whereas the strategy of market skimming is to gain high unit profits early in the products life cycle.

(2)

Question 1.18

The time taken to produce the first unit of a new product was 12 hours, by the time the 4th unit was made, the average time per unit had dropped to 6 hours. What was the rate of learning experienced?

(Answer must be written in the answering booklet)

(2)

The following scenario relates to questions 19 and 20.

A firm has established that maximum demand for its products is 80 000 units per annum. When it reduced its price by R20, demand rose by 1 600 units.

Question 1.19

What is the demand function?

A. P = 1 000 – 0,025x
B. P = 1 000 – 0.0125x
C. P = 50 – 0,025x
D. P = 500 – 0,0125x

(2)

Question 1.20

What price should be set in order to sell 50 000 units?

A. R125
B. R225
C. R375
D. R500

(2)

SECTION B

QUESTION 2 [15 marks]

YY is a large banking organisation. It has a branch in most of the towns in the country in which it operates. The bank's business is mainly concerned with private individuals. It is a very 'traditional' bank that offers only 'over the counter' services during limited opening hours.

At a recent board meeting, the directors of the bank stated that they were worried that the bank was losing customers to the new style banks that offer a much more friendly service, longer opening hours, internet banking and a diverse range of banking services.

It has now been decided that the bank will pursue strategies to achieve the goal of being "The bank that people choose" and will use a balanced scorecard to monitor progress towards that goal.

2.1 Produce and explain, for each of the four non-financial perspectives of a balanced scorecard, an objective (a goal), a performance measure for each objective that the bank could use.

(In your answer you must state each perspective, and the objective and performance measure for that perspective and explain why they support the goal of YY becoming "The bank that people choose".)

Use the table below as reference:

1. Perspective:
   Objective:
   Performance measure:
   Explanation:

(15)

Question 3 [10 marks]

Bell Limited operates as a manufacturer of electronic devices. The company is launching a new product (wireless projector) to the market in December 2019 and is currently considering its pricing strategy for this new product. The product will be unlike any other product that is currently available in the market. The unique position in the market is expected to remain only for six months before the company's competitors develops a similar product.

The following costs were incurred in building the prototype:

Cost item per	Amount
Direct Materials per projector	R 800
Direct labour per projector	R 475
Predetermined Overhead Rate allocated to each projector	R120

Bell requires a profit margin of 30% for all its products. The company expects to sell 1000 projectors before their competitors develop a similar product

REQUIRED:

3.1 Briefly outline five factors which would influence the price of the new product

(5)

3.2 Calculate the price at which one project would be sold at, if Bell adopts a full cost plus **pricing strategy.**

(5)

End of Section B

SECTION C

QUESTION 4 [30 marks]

Hilton Ltd is a hotel chain that was established in 1919 when Conrad Hilton bought his first hotel. Since then it has led the hotel industry with its innovative approach to products, amenities and services.

Transfer Pricing (2017)
Hilton Ltd has a number of divisions including a Furniture Division and a Hotel Division. The Hotel Division owns and operates a line of budget hotels located along major highways. Each year, the Hotel Division purchases furniture for the hotel rooms. Currently, it purchases a basic dresser from an outside supplier for R400.

The manager of the Hotel Division has approached the manager of the Furniture Division about buying 20 000 dressers from the Furniture Division.

The Furniture Division can make up to 50 000 dressers per year. The division is currently selling 40 000 dressers to outside companies for R400 per dresser. The full product cost of a dresser is R290, of which R200 is variable.

Financial Performance
Mr N Nemavhandu has recently been appointed as a financial director for the Hotels, this is after the previous financial director was found to not be competent in analysing the financial position of the company. As one of the heads of treasury, you have been given the task to analyse the company's capital structure, its risk and the assumed perspective of shareholders based on their finances.
Mr Nemavhandu has provided you with the following financial information:

Summarised Statement of Comprehensive Income of Hilton Ltd for the year ended 31 December 2017		
	2017 R'000	2016 R'000
Revenue	47500	45 500
Cost of sales	(27 625)	(25 515)
Gross profit	**19 875**	**19 985**
Operating expenses	(11 975)	(11 860)
Profit from operations	**7 900**	**8 125**
Finance costs	(1 350)	(1 650)
Profit before tax	**6 550**	**6 475**
Income tax expense	(1 834)	(1 813)
Profit for the year	**4 716**	**4 662**

NOTE: The Comprehensive Income does not include the costs associated with the dressers.

Summarised Statement of Financial Position of Hilton Ltd as at 31 December 2017		
ASSETS		
Non-current assets	**25 200**	**30 500**
Property, plant & equipment (PPE) at carrying amount	25 200	30 500
Current assets	13 824	8 022
Inventories	-----	-----
Trade receivables	**1 284**	**1 637**
Cash and cash equivalents	12 540	6 385
TOTAL ASSETS	**39 024**	**38 522**
EQUITY AND LIABILITIES		
Equity attributable to equity holders	**19 371**	**16 541**
Ordinary share capital (R1 shares)	1 000	1 000
Retained earnings	18 371	15 541
Non-current liabilities	**13 500**	**16 500**
10% Secured bank loan	13 500	16 500
Current liabilities	**6 153**	**5 481**
Trade and other payables	4 319	3 668
Income tax payable	1 834	1 813
TOTAL EQUITY AND LIABILITIES	**39 024**	**38 522**

Required:

4.1. **Identify and discuss** the objectives of a sound transfer pricing system.

(5)

4.2. **Calculate** the profit (PBIT) that the Hilton Hotel should expect from both the Furniture Division and the Hotel Division for the dressers based on the year 2017 using the market price as a basis for transfer prices.

(10)

4.3. **Calculate and Discuss** Hilton Ltd's ratios required by their shareholders with a **short summary**, for each ratio, to give Mr Nemavhandu a perspective of how the company's financial performance. The following ratios are expected:

- Return on Capital Employed
- Asset turnover
- Earnings per share
- Debt to Equity ratio
- Interest Cover
- Current ratio

Note: Half a mark will be awarded to each ratio calculation, meaning 1 mark per ratio and a full mark will be awarded for the discussion.

(15)

QUESTION 5 [25 marks]

Biashara (Pty) Ltd is a producer of high grade coffee roasts. The company buys coffee beans from Ethiopia (Buna) and Kenya (Kahawa). The coffee beans are then roasted, blended and packaged in one kilogram bags for sale to specialist coffee houses around the world. The major raw material in the coffee blends is the beans and the company's automated roasting, blending and packaging processes' have substantial overheads. Since the company is highly automated it uses very little direct labour. One kilogram of coffee beans yields one kilogram of roasted and blended coffee.

The budget for the coming year includes fixed production overhead costs of R3 300 000. Production overheads are applied using direct labour hours at the moment. The expected direct labour cost is R2 500 000 and the total budgeted direct labour hours are 18 334 hours. The above-mentioned labour costs are considered a variable cost.

The Buna coffee beans are R25 per kilogram while the Kahawa coffee beans are R22 per kilogram. Each kilogram of roasted and blended coffee requires ten minutes of labour. Packaging is R5 per kilogram of the Buna roast and it is 20% cheaper for the Kahawa roast.

Mr Tsi Binkie, the sales director, has just returned from an executive course at the Johannesburg Business School and has learnt that activity-based costing is more accurate than applying overheads using direct labour hours. He thinks this should be investigated.

The following fixed overhead cost information was compiled by a costing analyst:

Cost Pool	**Cost**	**Cost driver**
Ordering	R330 000	Purchase Orders
Material handling	R655 000	Number of set-ups
Roasting and blending	R1 545 000	Roasting and blending hours
Packaging	R770 000	Packaging Hours
	R3 300 000	

	Buna	**Kahawa**
Planned production and sales	80 000 kg	30 000 kg
Number of setups	32 setups	30 setups
Purchase order size	20 000kg per order	5 000 kg per order
Roasting and blending hours	15 000 hours	10 000 hours
Packaging time	2 400 hours	900 hours

REQUIRED:

5.1 Using direct labour hours as the base for applying manufacturing overhead cost to products, undertake the following:

5.1.1 Calculate the predetermined overhead rate that will be used during the upcoming year. **(2)**

5.1.2 Calculate the unit product cost of one kilogram each of the Buna and Kahawa roasts. **(5)**

5.1.3 Discuss whether you agree with direct labour hours being used as a base to apply manufacturing overheads. Should you not agree, recommend a more appropriate traditional base for Biashara to use. **(3)**

5.2 Using activity-based costing as a basis for applying manufacturing overhead cost to products, calculate the total amount of manufacturing overhead cost assigned to the Buna and Kahawa roasts for the year. **(12)**

5.3 The most critical step in activity-based costing is identifying cost drivers. Define a cost driver **and** briefly discuss whether you agree with this statement or not. **(3)**

<u>End of Section C</u>

Grand Total = 120