



UNIVERSITY
OF
JOHANNESBURG

DEPARTMENT OF ACCOUNTANCY

PERFORMANCE MANAGEMENT ADFM005/S3PFMQ6

LAST ASSESSMENT OPPORTUNITY: NOVEMBER 2017

TIME: 180 Minutes

MARKS: 100

ASSESSOR: Mrs M McGill

MODERATORS: Mr S Modiba (Internal)
Ms M Boshoff (External)

INSTRUCTIONS TO CANDIDATES

1. This paper consists of 10 pages.
2. You are reminded that answers may NOT be written in pencil. NO tippex may be used.
3. The marks shown against the requirement(s) for every question should be regarded as an indication of the expected length and depth of your answer.
4. Answer the questions by the use of:
 - effective structure and presentation;
 - clear explanations;
 - logical arguments; and
 - clear and concise language.
5. Answer ALL questions in the answer book/s provided.
6. Show all calculations clearly.
7. Silent, non-programmable financial calculators may be used, unless otherwise instructed.
8. All open spaces must be crossed out with a pen.

Question	Marks	Time allocated (minutes)
1	25	45
2	10	18
3	15	27
4	25	45
5	25	45
Total	100	180

SECTION A**[25 marks]****QUESTION 1****(25 marks)****[Where applicable, round all answers to the nearest rand]**

Select the correct option by WRITING the corresponding letter of the answer on the answer sheet.

Question 1.1

When are the bulk of a product's life cycle costs normally determined?

- A At the design/development stage.
- B When the product is introduced into the market.
- C When the product is in its growth stage.
- D On disposal.

(1)**Question 1.2**

TA company is about to commence work on a repeat order for a customer. The item to be manufactured is identical to the first order, and it is expected that a 90 per cent learning curve will apply to the labour operations. The time taken to produce the first item was 100 hours.

If labour is paid at the rate of R7 per hour, the labour cost of manufacturing the second item will be:

- A R560
- B R630
- C R700
- D R1 260

(2)**Question 1.3**

Life cycle costing is:

- A The profiling of cost over a product's production life.
- B The profiling of cost and revenues over a product's production life.
- C The profiling of cost over a product's development, production life and dismantling period.
- D The profiling of cost and revenues over a product's development, production life and dismantling period.

(1)**Question 1.4**

When is a market penetration pricing policy appropriate?

- A If a product is new and different.
- B If demand is highly elastic.
- C If demand is inelastic.
- D If there is no possibility of economies of scale.

(1)

Question 1.5

A flexible budget is a budget that:

- A Is changed during the budget period according to changed circumstances.
 - B Is continuously updated by adding a further accounting period when the earliest accounting period has expired.
 - C Results from the participation of budget holders
 - D Recognises different cost behaviour patterns and is designed to change as the volume of activity changes
- (1)**

Question 1.6

The board of directors of X plc has agreed a budget that reflects significant savings brought about by new working practices. However, at the recommendation of the Finance Director, a contingency has been included in the budget to allow for the fact that not all improvements will come to fruition in reality.

What type of standard has been used to set this budget?

- A Ideal
 - B Attainable
 - C Current
 - D Basic
- (1)**

Question 1.7

Copenhagen plc is an insurance company. Recently there has been concern that too many quotations have been sent to clients either late or containing errors.

The department concerned has responded that it is understaffed, and a high proportion of current staff has recently joined the firm. The performance of this department is to be carefully monitored.

Which ONE of the following non-financial performance indicators would NOT be an appropriate measure to monitor and improve the department's performance?

- A Percentage of quotations found to contain errors when checked
 - B Percentage of quotations not issued within company policy of three working days
 - C Percentage of department's quota of staff actually employed
 - D Percentage of budgeted number of quotations actually issued.
- (1)**

Question 1.8

Which one of the following is not one of the four perspectives of Kaplan and Norton's balanced scorecard?

- A Financial perspective
 - B Customer perspective
 - C Internal business perspective
 - D Environmental perspective
- (1)**

Question 1.9

Division Y has reported annual operating profits of R40.2 million. This was after charging R6 million for the full cost of launching a new product that is expected to last three years. Division Y has a risk adjusted cost of capital of 11%. The historical cost of the assets in Division Y, as shown on its balance sheet, is R100 million, and the replacement cost has been estimated at R172 million.

The EVA for Division Y is:

- A R23.28 million
 - B R24.84 million
 - C R29.20 million
 - D R30.44 million
- (2)**

Question 1.10

X and Y are two divisions of Oldhat Ltd. Division X manufactures one product, the XX, with a unit production cost of R12 which includes R2 of absorbed fixed overhead. The prevailing market price for the XX is R16. Product XX is sold outside the company in a perfectly competitive market and also to division Y. If sold outside the company, variable selling costs of R2 per unit are incurred.

If the total demand for the XX is more than sufficient for division X to manufacture to capacity, what would be the minimum price division X would accept to transfer the XX to division Y?

- A R10
 - B R12
 - C R14
 - D R16
- (2)**

Question 1.11

An investment has a net present value of R35 000 at 2% and R15 000 at 8%.

What is the approximate internal rate of return?

- A 10.50%
 - B 12.50%
 - C 9.50%
 - D 8.00%
- (2)**

Question 1.12

When deciding between mutually exclusive investment projects with unequal lives, the decision should be based on a comparison of:

- A The net present value of future cash flows of each cycle.
 - B The future value of future cash flows of each cycle
 - C Total cash flows of each cycle
 - D Annualised equivalent cash flows of each cycle.
- (1)**

Question 1.13

An investor is indifferent between replacing a machine every 2 years, and replacing it every 4 years.

The present value of the first 2 years replacement cycle is R17,360, and the present value of the first 4 year replacement cycle is R31,700.

What discount rate is the investor using?

- A 5%
- B 10%
- C 15%
- D 20%

(2)**Question 1.14**

Briggs plc has analysed a particular risk faced by its Scarborough division on a risk map. It has concluded that the matter has a low impact but there is a high probability of its occurrence.

Which of the following risk responses would be most appropriate?

- A Risk avoidance
- B Risk reduction
- C Risk transfer
- D Risk acceptance

(1)**Question 1.15**

Which of the following is not a technique for measuring risk?

- A Sensitivity analysis.
- B Risk mapping.
- C Variance
- D Standard deviation of expected returns

(1)**Question 1.16**

A five-year project has a net present value of R160,000 when it is discounted at 12%. The project includes an annual cash outflow of R50,000 for each of the five years. No tax is payable on projects of this type.

The percentage increase in the value of this annual cash outflow that would make the project no longer financially viable is closest to:

- A 64%
- B 89%
- C 113%
- D 156%

(2)

Question 1.17

To what does the internal rate of return equate the present value of expected future net cash receipts?

- A Initial cost of the investment outlay
- B Depreciated value of the investment
- C Terminal (compound) value of future cash receipts
- D Zero

(1)**Question 1.18**

A contract is to be commenced immediately. In one year's time it will require material EH. The material costs R7 800 now but will cost R8 800 in one year's time. The cost of storing EH for one year is R110 payable in one year's time.

If the contractor's cost of capital is 10% per annum, what is the present value of using the material if the contractor wishes to maximise profit?

- A R7 900
- B R7 999
- C R7 800
- D R7 910

(2)

“End of Section A”

SECTION B**[25 marks]****QUESTION 2****(15 marks)**

A company is developing a new product. During its expected life it is expected that 8 000 units of the product will be sold for R90 per unit.

The direct material and other non-labour related costs will be R45 per unit throughout the life of the product.

Production will be in batches of 1 000 units throughout the life of the product. The direct labour cost is expected to reduce due to the effects of learning for the first four batches produced. Thereafter the labour cost will remain at the same cost per batch as the 4th batch. The direct labour cost of the first batch of 1 000 units is expected to be R40 000 and a 90% learning effect is expected to occur

There are no fixed costs that are specific to the product.

REQUIRED:

- | | | |
|------------|--|------------|
| 2.1 | Calculate the average direct labour cost per batch of the first four batches | (3) |
| 2.2 | Calculate the direct labour cost of the 4th batch. | (6) |
| 2.3 | Calculate the contribution earned from the product over its lifetime. | (6) |

QUESTION 3**(10 marks)**

A company uses “total cost plus” pricing. Recent results show that profits are falling and that the company is losing market share in what is becoming a very competitive market.

REQUIRED:

- 3.1** Explain TWO disadvantages of “total cost plus” pricing. **(4)**
- 3.2** Explain how target costing could be of benefit to the company **(6)**

“End of Section B”

SECTION C**[50 marks]****QUESTION 4****(25 marks)**

TY comprises two trading divisions. Both divisions use the same accounting policies. The following statement shows the performance of each division for the year ended 31 August..

Division	T	Y
Sales	R3 600 000	R3 840 000
Variable cost	R1 440 000	R1 536 000
Contribution	R2 160 000	R2 304 000
Fixed cost	R1 830 000	R1 950 000
Operating profit	R330 000	R354 000
Capital employed	R3 167 500	R5 500 000

Investment by Division T

Division T is currently operating at its full capacity of 50 000 units per year and is considering investing in new equipment which would increase its present capacity by 25%. The machine has a useful life of three years. This would enable Division T to expand its business into new markets. However, to achieve this it would have to sell these additional units of its product at a discounted price of R60 000 per unit. The capital cost of the investment is R1.35bn and the equipment can be sold for R400m at the end of three years.

Division T believes that there would be no changes to its cost structure as a result of the expansion and that it would be able to sell all of the products that it could produce from the extra capacity. It is company policy of TY that all divisions use a 10% cost of capital to evaluate investments.

REQUIRED:

- 4.1** Prepare an analysis of the sales made by Division Y for the year ended 31 August to show the contribution earned from external sales and from internal sales. **(3)**
- 4.2** Assuming that the current transfer pricing policy continues:
 - 4.2.1** Evaluate using NPV, the investment in the new equipment from the perspective of Division T. **(8)**
 - 4.2.2.** Evaluate, using NPV, the investment in the new equipment from the perspective of TY. **(4)**
- 4.3** Discuss the appropriateness of the current transfer pricing policy from the perspective of EACH of the divisional managers AND the company as a whole. **(10)**

QUESTION 5**(25 marks)**

After an incident with a balloon in 2013, Bradley Badger decided to start his own company, No-Popping (Pty) Ltd, which manufactures balloons with a lifetime guarantee of not popping.

Bradley was very disappointed when his accountant showed him the financial results for the first year of business as the variances on his performance report showed that the company overspent on all its expenses.

The budget for the year ended 31 December 2014 was as follows:

Number of balloons sold and produced (Pack of 10)	400 packs
	R
Sales	856 000
Direct material	140 000
Direct labour	120 000
Variable overhead expenses	30 000
<i>Contribution</i>	<i>566 000</i>
Fixed cost	230 000
<i>Net profit</i>	<i>336 000</i>

Actual results for the year ended 31 December 2014 were as follows:

Number of balloons sold and produced (Pack of 10)	740 packs
	R
Selling price per pack	2 850
Direct materials	240 000
Direct labour	190 000
Variable overhead expenses	90 000
Fixed cost	260 000

REQUIRED:

- 5.1** Prepare the flexible budget for No-Popping (Pty) Ltd for the year ended 31 December 2014 and use this information to calculate variances which will give a better indication of performance **(25)**

--o0o--- END --o0o---