

LECTURE NOTES

LECTURER:
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MODULE:
MAC3701

REVISION PACK 2

DATE:
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MAC3701 – REVISION PACK 2 - QUESTIONS

The following information must be used to answer questions 1 and 2, bearing in mind that sub-questions must be considered independently of one another.

Abelia (Pty) Ltd is a wholesaler of sporting equipment. The business sells approximately 8 500 tennis rackets per annum. Sales are evenly distributed throughout the year, and the business is operational for 330 days per annum.

Additional information:

- Purchase price R450
- Order costs R175
- Lead time 6 days
- Cost of capital (after taxation) 20%
- Direct inventory holding costs R25

QUESTION 1

The economic order quantity for the tennis rackets is:

- (1) ≈345 units
- (2) ≈182 units
- (3) ≈161 units
- (4) ≈79 units
- (5) None of the above options

$$\frac{2 \times 8500 \times 175}{25 + 90} = 161 \text{ units}$$

20/0 X450

QUESTION 2

The re-order point for the tennis rackets if 30 tennis rackets are kept as safety inventory is:

- (1) 1185 units
- (2) 1155 units
- (3) 158 units
- (4) 130 units
- (5) None of the above options

Demand/day x lead + SS

$$\frac{8500}{330} \times 6 + 30 = 154.554 = 155 \text{ units}$$

The following information must be used to answer questions 3 to 5, bearing in mind that sub-questions must be considered independently of one another.

Birch Ltd has just started manufacturing 10-seater dining tables with chairs, and to date has manufactured and sold four of these sets. Cedar PLC, a wholesaler, is interested in purchasing 12 of these dining tables and chairs sets and would like a quote from Birch Ltd.

The variable manufacturing costs for the first four dining table and chairs sets was as follows:

	R
Direct labour at R50 per labour hour	15 360
Direct material costs	23 210
Overheads (variable at 40% direct labour hours, and 60% raw material costs)	22 000

Additional information:

- The total direct labour hours to manufacture the first set were 120 hours, and the total direct labour hours to manufacture the first two sets were 192 hours.
- Fixed production overheads solely for the manufacture of the first 32 sets amount to R64 000.
- Organisational overheads of the enterprise are to be apportioned at a rate of 5% of direct labour costs.
- Raw material costs have increased by 10% since the first four sets were produced.
- It is expected that the learning rate will be maintained for the manufacture of the first 32 sets.

In general, hours must be rounded off to 3 decimals. Final hours must, however, be rounded off to the nearest hour. All other calculations must be rounded off to the nearest rand or unit.

QUESTION 3

The learning curve is:

- 0.96
- 0.80
- 96%
- 80%
- None of the above options

$$D.L = \frac{15360}{50} = 307.2 \text{ hrs} / 4 = 76.8 \text{ hrs}$$

$$D.M = \frac{23210}{4} = 5807.50$$

$$o/h = \frac{22000}{40\%} = 55000$$

$$\frac{55000}{60\%} = 91666.67$$

$$1068800 \quad 13200 \text{ Mat}$$

$$\frac{\text{Time for 1st} + 2nd}{\text{Time for 1st} \times 2} = \frac{192}{120 \times 2} = 80\%$$

$$0.8^4 \times 120 = 49.152 \text{ hrs}$$

$$\text{AN for 4st 16} \times 16$$

$$\frac{786.43 \text{ hrs}}{307.20}$$

$$\frac{479.232}{479 \text{ hrs}}$$

QUESTION 4

The time required to manufacture 12 dining table and chair sets is:

- 594 hours
- 479 hours
- 307 hours
- 286 hours
- None of the above options

QUESTION 5

The minimum selling price that the company can quote for the 12 sets in order to recover the relevant costs and earn a profit of 25% based on the cost price is:

- R218 576
- R220 074
- R233 148
- R237 725
- None of the above options

$$\text{Mat cost} = [5802.50 \times 12] = 69630$$

$$L.C = [479 \times 12] = 5748$$

$$o/h = \frac{8800}{12} \times 12 = 8800$$

$$\text{Mat } [5360 / 23210 \times 76593]$$

$$F.C = (64000 / 2014) \times 23210 = 76593$$

$$23980$$

$$13721$$

$$43560$$

$$157824$$

$$\text{sub } 24000$$

$$x 25 \text{ Markup } 181894$$

$$181894$$

$$45496$$

$$297280$$

The following information must be used to answer questions 6 and 7, bearing in mind that sub-questions must be considered independently of one another.

Dogwood Manufacturers process a single product into 2 separate products, Ebony and Fir. Both products can be sold at the split-off point, product Ebony at R12 per kilogram and product Fir at R6 per kilogram. During January 2014 15 000 kilograms of input was used to produce 6 000 kilograms of Ebony and 9 000 kg of Fir. The joint cost of the input was R52 500.

QUESTION 6

The joint cost allocated to product Ebony according to the physical measure method is:

- R22 522.50
- R29 977.50
- R31 500.00
- R21 000.00
- None of the above options

QUESTION 7

The joint cost allocated to product Fir according to the sales value at split-off point method is:

- R22 522.50
- R29 977.50
- R31 500.00
- R21 000.00
- None of the above options

QUESTION 8

Consider the validity of the following statements with regard to cost systems:

- Both traditional and ABC systems assign indirect costs to cost objects.
- Volume-based cost drivers assume that a product's consumption of overhead resources is directly related to units produced.
- A traditional costing system allocates overheads to production and service departments in the second stage of a two-stage process.
- The disadvantage of direct costing systems is that systems are not in place to measure and assign indirect costs to cost objects.

Indicate which of the above statements are true:

- Statements 1 and 2
- Statements 1 and 3
- Statements 2, 3 and 4
- Statements 1, 2 and 4
- None of the above options

The following information must be used to answer questions 9 and 10, bearing in mind that sub-questions must be considered independently of one another.

Redbay CC manufactures cardboard boxes in a single process. Material is added at the beginning of the process and conversion costs are incurred uniformly throughout the process. Spoilage occurs at the end of the process.

Cost and production information for February 2014 is as follows:

	R	Units
Work in process: 1 February (40% completed)	19 689	12 000
Material	16 230	
Conversion costs	3 459	
Material added in February	101 745	90 000
Conversion costs in February	19 041	79 200
Completed and transferred to finished products		15 000
WIP: 28 February (75% completed)		

Additional information:

- The weighted average method is used for inventory valuations.
- Normal wastage is 5% of input and there were 7 800 spoiled units.
- Wastage occurs at the end of the process.

QUESTION 9

The abnormal spoilage for February is:

- 7 800 units
- 4 500 units
- 3 300 units
- zero units
- None of the above options

QUESTION 10

The equivalent cost per unit for Material is: (1) R1,45

- R1,24
- R1,21
- R0,24
- None of the above options

The following information must be used to answer questions 11 to 13, bearing in mind that sub-questions must be considered independently of one another.

Palm (Pty) Ltd is a supplier of woodworking tools. One of its products is a sanding machine selling at R4 900.

The company sells on average approximately 20 sanding machines per week. Sales take place evenly throughout the year which consists of 50 weeks.

The company purchases the sanding machines at a cost of R3 430 each. The cost to place an order amounts to R300 and orders are executed within 5 weeks.

Safety inventory should amount to the sales requirement for 3 weeks.

Direct inventory holding costs are R35,00 per unit and insurance on the sanding machines amounts to 10% of the unit cost per year.

The supplier has offered a quantity discount of 5% per sanding machine on orders of 150 units. The company implemented the economic order quantity type to manage its inventory.

The current required after tax cost return on capital is 4% per annum.

QUESTION 11

The economic order quantity for the sanding machines is:

- 59 units
- 35 units
- 13 units
- 05 units
- None of the above option

QUESTION 15

The total labour cost (rounded to the nearest rand) for the manufacture of the next six routers is:

- (1) R241 776
- (2) R266 147
- (3) R273 715
- (4) R331 776
- (5) None of the above options

Use the information of IM6.5 at the back of chapter 6 in Drury to answer questions 16 and 17, bearing in mind that sub-questions must be considered independently of one another.

QUESTION 16

The joint costs allocated to product Q using the net realisable sales value method is:

- (1) R151 964
- (2) R160 000
- (3) R456 036
- (4) R608 000
- (5) None of the above options

QUESTION 17

The estimated profit of product T using the net realisable sales value method is:

- (1) R7 844
- (2) R24 156
- (3) R174 216
- (4) R57 784
- (5) None of the above options

The following information must be used for purposes of answering questions 18 and 19, bearing in mind that questions must be considered independently from one another.

You are an accounting clerk at Mahogany Limited. Mr Elder, one of the sales representatives, requested your department to estimate the expected maintenance cost of his vehicle for August 2014. He gave a summary of the average number of kilometres travelled per day for the past seven months, as well as of the average daily maintenance costs for the corresponding period.

Your departmental head, being in a hurry, supplied you with only the following information:

Period: August 2013 - February 2014

Σx	=	1 980
Σy	=	1 324
Σx^2	=	563 400
Σy^2	=	251 676
Σxy	=	376 510
r	=	0,9816

<p>Relevant formulae:</p> $y = a + bx$ $\Sigma y = na + b\Sigma x$ $\Sigma xy = a\Sigma x + b\Sigma x^2$

QUESTION 12

The inventory holding costs for the EOQ are:

- (1) R66 310,65
- (2) R40 185,60
- (3) R8 700,00
- (4) R2 100,00
- (5) None of the above options

QUESTION 13

The ordering costs for the EOQ are:

- (1) R66 310,65
- (2) R40 185,60
- (3) R8 700,00
- (4) R2 100,00
- (5) None of the above options

The following information must be used to answer questions 14 and 15, bearing in mind that sub-questions must be considered independently of one another.

Poplar Limited manufactures woodwork machinery. The company has manufactured two routers and the direct labour cost amounted to R30 000. The direct labour hours for the first two routers were as follows:

Hours	
First router	8 000
Second router	7 360
Total time for first two routers	15 360

The learning curve was calculated at 96% and is expected to continue for the first 16 routers built. An order for six more routers has just been received. Since the first two routers were manufactured the price of labour increased by 10%.

QUESTION 14

The cumulative average time per router (rounded to two decimals), for the manufacture of the first eight routers is:

- (1) 7 680,00 hours
- (2) 7 372,80 hours
- (3) 7 077,89 hours
- (4) 6 794,77 hours
- (5) None of the above options

QUESTION 18

Determine the value of a, assuming that $b = 0,6004$. **NB: Round to 4 decimal places**

- (1) 660,2028
- (2) 135,2080
- (3) 169,2958
- (4) 19,3154
- (5) None of the above options

QUESTION 19

Determine the average daily maintenance cost if 250 kilometres per day are travelled. **NB: Round to the nearest cent**

- (1) R169,42
- (2) R285,31
- (3) R319,40
- (4) R810,30
- (5) None of the above options

QUESTION 20

Sycamore Ltd manufactures a single product in one process. The following information for July 2013 is available:

	Units	Raw material	Conversion costs
WIP – 1 July 2013 (40% completed)	20 000	72 000	33 100
Finished products transferred	71 000	?	?
Put into production	80 000	266 500	155 400
WIP – 31 July 2013 (75% completed)	16 000	?	?

Additional information:

1. Raw material is added at the beginning of the process and conversion costs are incurred evenly throughout the process.
2. Normal loss is estimated at 10% of the units that have reached the wastage point.
3. Losses occur when the process is 50% completed.
4. The FIFO method of inventory valuation is used

The equivalent units of abnormal loss for conversion costs for July 2013 is:

- (1) 10 000 units
- (2) 5 000 units
- (3) 1 500 units
- (4) 3 000 units
- (5) None of the above options

QUESTION 21

The following information is available for Lotus (Pty) Ltd for the year ended 31 March 2014:

Trial balance at 31 March 2014

	Dr R	Cr R
Share capital		110 000
Retained income		22 500
Loan LTA Bank		80 000
Investment Aloe Ltd	50 000	
Furniture and equipment	120 000	
Vehicles	100 000	
Accumulated depreciation: Furniture and equipment		30 000
Accumulated depreciation: Vehicles		20 000
Inventory	5 000	
Debtors	40 000	
Creditors		40 300
Bank		12 200
Receiver of revenue		315 000
	315 000	315 000

Additional information:

1. The authorised share capital consists of 15 000 shares at R10 each.
2. The loan from LTA Bank bears interest at 10% per annum payable in advance. No repayment is due within the next financial period.
3. Aloe Limited has declared a dividend of R4 000 payable on 31 May 2014.
4. Sales are estimated at R75 000 per month and purchases amount to an estimated R 28 000 per month.
5. Inventory on hand at the end of the next quarter is estimated at R8 500.
6. Depreciation on furniture and equipment is at 25% per annum on the straight line method and on vehicles at 20% on the straight line method.
7. Provision for taxation of R9 800 must be made.
8. Monthly expenses are as follows:

	Cost per month R
Rental	6 000
Salaries and wages	18 000
Telephone	580
Water and electricity	450

The following other expenses are payable during the next quarter (April to June 2014):

	R
Administration expenses	13 000
Travelling expenses	8 000
Other expenses	800

REQUIRED:

Prepare the budgeted Statement of Profit or Loss and other comprehensive income (income statements) of Lotus (Pty) Ltd for the quarter April to June 2014. (16)

The following information must be used for the purposes of answering questions 22 and 23.

Alpha Limited manufactures a single product.

You are provided with the following information regarding the standard cost per unit:

Material Beta	3 kg @ R10 per kg	R 30
Material Gamma	9 kg @ R15 per Kg	135
Labour	6 clock hours @ R12	72
Fixed overheads		58
Variable overheads		<u>30</u>
		<u>325</u>

Alpha Limited makes a 10% allowance for idle time.

Actual information for January 2014:

1. Number of units produced: 5 000
2. Materials:
 - Purchased Bela: 20 000 kg for R209 000
 - Gamma: 54 000 kg for R756 000
 - Issued Bela: 18 500 kg
 - Gamma: 45 500 kg
3. Labour cost: R294 000 for 30 000 hours clocked. Work hours amounted to 27 600.

QUESTION 22

REQUIRED:

Calculate the material price, mix and yield variance. (13)

QUESTION 23

REQUIRED:

Calculate the labour rate, idle time and efficiency variance (9)

QUESTION 24

Define divisionalisation and discuss the advantages and disadvantages thereof. (10)

QUESTION 25

Medix Limited, a pharmaceutical company based in Gauteng is currently reviewing a research project involving a new anti-retroviral drug which to date has cost the company R750 000. Should the project be allowed to proceed, it is anticipated that it would take a period of 12 months to complete after which the results would be sold to a public entity for R1 000 000.

The managing director has provided you with the following expenses that are deemed necessary in order to complete the project:

1. Material X R120 000

This material has recently been delivered. There is no other use for this material other than this research project. It would cost an estimated R8 000 to dispose of.

2. Material Y R75 000

This material is in stock and used frequently by the company. The purchase price for this material has risen by 6% since the previous purchase.

QUESTION 27

Cyclamen CC manufactures machine parts namely Product A and Product B. The following information is the budgeted information available for the quarter July to September 2014:

	Product A	Product B
Material X (at R7,00 per kg)	12 kilograms	12 kilograms
Material Y (at R10 per kg)	6 kilograms	8 kilograms
Direct labour (at R20 per hour)	4 hours	6 hours
Expected sales	5 000 units	1 000 units
Selling price per unit	R600	R800
Value of opening inventory	R38 400	R26 200
Opening inventory (units)	100	50
Expected closing inventory (units)	1 100	50

Additional information:

1. It has been established that 10% of units completed are faulty and they cannot be rectified.
2. The inventory on hand at 31 August 2014 is 7 000 kg of material X and 6 000 kg of material Y.
3. The expected closing inventory of the materials is 8 000 kg of material X and 2 000 kg of material Y.
4. After the above information was obtained it was established that the cost of material Y was to increase by 20% as from July 2014.

REQUIRED:

Prepare the following sub-budgets for Cyclamen CC:

- Sales budget (2)
 - Production budget (5)
 - Raw material usage budget (6)
 - Raw material purchases budget (5)
 - Direct labour budget (5)
- [23]**

3. Skilled labour R300 000

These labour costs relate to workers that will be transferred to this project from another project. Extra labour will need to be recruited to the other project at a cost of R320 000.

4. Research staff R200 000

A decision has already been taken that this will be the last major piece of research undertaken, and consequently, when work on the project ceases, the staff involved will be made redundant. Redundancy and severance pay has been estimated at R100 000.

5. General building expenses R60 000

This expense represents a general expense that is allocated by the accounts department to each department on an annual basis

REQUIRED

Advise the managing director on whether or not the research project should be completed. Your answer should include calculations of relevant costs and income as well as explanations as to each item excluded in the calculations.

QUESTION 26

Use the information as contained in Drury IM25.1

REQUIRED

Calculate the product mix that will maximise profit.

(22)
[80]

QUESTION 28

SA Slabs Limited specialised in the manufacturing of concrete slabs which are used in the building of houses. Only one size slab was manufactured during the past financial year. The company makes use of a standard costing system and stock records are kept at standard cost.

The budgeted information for the past financial year ended 31 March 2014, at a capacity utilisation of 20 000 labour hours, was as follows:

Production cost (per slab)	R
Material- 10kg	17
Labour- 2 hours at R6 per hour	12
Variable manufacturing overheads	16
Fixed manufacturing overheads	20
	<u>65</u>

Overheads are allocated to production on the basis of labour hours.

The actual results for the year ended 31 March 2014 were as follows:

Total production cost	R
Material (at R1,75 per Kg)	176 400
Labour	165 000
Variable manufacturing overheads	171 600
Fixed manufacturing overheads	205 000

Additional information:

- 10 500 slabs were actually manufactured.
- The change in inventory levels of materials and finished goods during the year was insignificant.
- Due to wild cat strikes and after negotiations with trade unions, a 25% wage increase for all the production workers came into being from 1 April 2013. The effect being that the actual wage rate for the budgeted period differed from the budgeted wage rate. The budget for the past year had already been finalised and the standard labour rate was left as initially shown in the budget.

REQUIRED

- Determine the total variable production cost as budgeted for the past financial year which ended on 31 March 2014. (3)
- Calculate the appropriate variances in respect of each of the following production cost elements: (6)
 - Material (7½)
 - Labour (5½)
 - Variable manufacturing overhead (10)
 - Fixed manufacturing overhead [32]

QUESTION 29

Bunting Limited has two divisions, namely Sparrow and Thrush. The performance of these divisions is currently under review.

You are provided with the following information:

	Net assets	Profit
	R	R
Sparrow	300 000	70 000
Thrush	650 000	140 000

Bunting Limited has a current cost of capital of 15%.

REQUIRED

- Calculate the return on investment (ROI) and residual income (RI). (5)
- State which method of performance evaluation (ROI or RI) would be more useful when comparing the performance of each division and why. (2)
- Using ROI as a basis, discuss whether the manager of the Sparrow division should invest in a proposed project offering a 22% return. Your answer should state whether he/ she is acting in the best interests of Bunting Limited. (4)

QUESTION 30

Kid Buzz is a family owned business specialising in the manufacture of electronic children's toys. The company currently produces a circuit board that is used in its most popular line of children's computers. Recently, they have been approached by an outside supplier offering to sell 8 000 circuit boards to Kid Buzz at a price of R19 each.

The financial manager has provided you with the following information relating to the costs of producing 8 000 circuit boards annually:

	Total for 8 000 circuit boards	Unit cost
	R	R
Direct materials	48 000	6
Direct labour	32 000	4
Variable overhead	8 000	1
Supervisor's salary	24 000	3
Depreciation of specialised equipment	16 000	2
Allocated general overheads	40 000	5
Total cost	168 000	21

Additional information:

- It is expected that the cost of all labour will increase by 10% in the following financial year. All other costs are expected to remain unchanged in the foreseeable future if Kid Buzz continues to manufacture the circuit boards.
- If Kid Buzz outsources the circuit boards, the labour currently employed can be utilised in other departments.
- Should Kid Buzz no longer produce these circuit boards, the specialised equipment which has no other use could be sold for R30 000.

REQUIRED

Advise Kid Buzz on whether they should continue manufacturing the circuit boards (You should use the comprehensive approach and explanations for each item included in your calculations). (11)

QUESTION 31

Oceana Ltd produces two different products namely the Coral and Shell. Both products require processing in the machining and finishing department.

	Contribution per unit	Machining time required per unit (minutes)	Finishing time required per unit (minutes)	Raw material (Silica) required per unit (kg)
Coral	2	6	10	-
Shell	2,50	12	6	3 kg

Additional information:

- The daily capacities of each department are 1 200 minutes each.
- Silica, the raw material required in the production of Shell, is a scarce resource and is limited to 270kg per day.
- The demand for Coral and Shell are unlimited.

REQUIRED

By making use of linear programming techniques, specify the product mix that will maximise daily contribution. (13)
[90]

The following information must be used for purposes of answering questions 32 and 33, bearing in mind that questions must be considered independently from one another.

Mango (Pty) Ltd

Statement of comprehensive and other income for the year ended 28 February 2014

	R
Sales (90 000 units)	900 000
Less: Cost of sales	<u>561 000</u>
Direct material	1 500 000
Direct labour	270 000
Manufacturing overheads	36 000
- Variable	120 000
- Fixed	<u>339 000</u>
Gross profit	364 600
Less: Operating expenses	
Selling expenses	
- Variable (sales commission)	90 000
- Fixed	134 000
Advertising	50 000
Salaries	84 000
Administrative expenses (fixed)	140 000
Net loss	<u>25 000</u>

It has been established that sales can be influenced by increasing or decreasing the amount spent on advertising.

The break even sales in units are:

- (1) 96 098 units
- (2) 90 000 units
- (3) 77 255 units
- (4) 61 952 units
- (5) None of the above options

QUESTION 32

The amount by which advertising can be increased in order to increase the sales volume from 90 000 units to 150 000 units, and to make a simultaneous profit of 5%, based on turnover is:

- (1) R640 000
- (2) R394 000
- (3) R160 000
- (4) R146 000
- (5) None of the above options

The following information must be used for purposes of answering questions 33 and 34, bearing in mind that sub-questions must be considered independently from one another.

Optispec Limited manufactures spectacle frames. The following information relates to January 2014:

Products	Budgeted sales units	Budgeted production cost per unit	Budgeted selling price per unit	Actual sales in units	Actual sales revenue
SpecWise	700	R1 200	R1 800	650	R1 131 000
EyeWizz	300	R3 500	R5 250	500	R2 490 000

QUESTION 33

Calculate the sales mix variance, for the purpose of reconciling sales, based on sales revenue. (Round all calculations to the nearest rand and nearest complete unit)

- (1) R997 500 Unfavourable
- (2) R174 000 Unfavourable
- (3) RNil
- (4) R534 750 Favourable
- (5) None of the above options

QUESTION 34

Calculate the sales price variance.

- (1) R1 422 000 Favourable
- (2) R41 100 Unfavourable
- (3) R174 000 Unfavourable
- (4) R 1 243 500 Unfavourable
- (5) None of the above options

The following information must be used for purposes of answering questions 35 and 36, bearing in mind that questions must be considered independently from one another.

Branjo Limited produces joint products Bran and Jo with by-product Li. The following information applies:

	Production (tons)	Sales (tons)	Selling price per ton
Product Bran	1 200	1 200	R80
Product Jo	800		
Product Li	500	500	R50

Additional information:

1. Raw materials of R45 000 and conversion costs of R55 000 make up the joint costs.
2. Product Jo was converted to product Li at a cost of R15 000.
3. There was no opening or closing inventory.

QUESTION 35

The journal entry for the sale of the by-product Li is:

- (1) Dr Bank; Cr Inventory Li with R10 000
- (2) Dr Inventory Li; Cr Bank with R10 000
- (3) Dr Bank; Cr Inventory Li with R25 000
- (4) Dr Inventory Li; Cr Bank with R25 000
- (5) None of the above options

QUESTION 36

Which one of the following statements is false?

- (1) The joint costs allocated to products Bran and Jo will be R115 000.
- (2) The joint costs allocated to products Bran and Jo will be R100 000.
- (3) The joint costs allocated to products Bran and Jo will be R90 000.
- (4) The joint costs allocated to products Bran and Jo will be R15 000.
- (5) None of the above options

The following information must be used for purposes of answering questions 37 and 38, bearing in mind that sub-questions must be considered independently from one another:

Blue Crane Limited is currently considering a special project. The managing director has provided you with the following information relating to the two (2) types of material required for the project:

Material	No. of units required for the contract	No. of units currently in stock	Purchase price per unit currently in stock (R)	Current purchase price per unit (R)	Current resale price (R)
A	360	480	100	108	90
B	1500	750	250	220	180

Material A is in regular use by the company. Material B is of a specialised nature and has no foreseeable use in the business.

QUESTION 37

In deciding on the viability of the special project, the relevant cost for material A would be:

- (1) R32 400
- (2) R36 000
- (3) R38 880
- (4) R48 000
- (5) None of the above options

QUESTION 38

The relevant cost for Material B would be:

- (1) R165 000
- (2) R300 000
- (3) R390 000
- (4) R352 500
- (5) None of the above options

QUESTION 39

A responsibility centre in which a manager is responsible for sales revenues, costs as well capital investment decisions is a(n):

- (1) Cost or expense centre
- (2) Revenue centre
- (3) Profit centre
- (4) Investment centre
- (5) None of the above options

QUESTION 40

Consider the following statements:

1. A regression equation identifies an estimated relationship between a dependent variable and one or more independent variables.
2. The least-squares method is a mathematical method of determining the regression line of best fit.
3. The correlation coefficient (r) represents the degree of association between two variables, such as cost and activity.
4. A cost function is normally only valid within the range of the actual observations that were used to establish the cost function equation.

Which of the above statements is true?

- (1) All of the above statements
- (2) Statements 1 and 2
- (3) Statement 1, 2 and 3
- (4) Statements 2, 3 and 4
- (5) None of the above options

The following information must be used for purposes of answering questions 41 and 42, bearing in mind that questions must be considered independently from one another.

The following budgeted information relates to Tanugo Plc:

	Product TA	Product NU	Product GO
Sales in units	10 000	20 000	25 000
Selling price per unit	R180	R120	R100
Variable cost per unit	R90	R64	R60
Direct fixed costs	R80 000	R65 000	R50 000

Common fixed costs amount to R825 000.

QUESTION 41

The budgeted profit for Product GO is:

- (1) R820 000
- (2) R950 000
- (3) R1 000 000
- (4) R1 055 000
- (5) None of the above options

QUESTION 42

The total budgeted profit for Tanugo Plc is:

- (1) R3 680 000
- (2) R3 020 000
- (3) R2 825 000
- (4) R2 000 000

The following information must be used for purposes of answering questions 43 and 44, bearing in mind that questions must be considered independently from one another.

The following information was obtained from Dango Limited for the year ended 31 May 2014 about two of its subsidiaries:

	Dan CC R	Goli Ltd R
Net profit	500 000	1 200 000
Fixed costs	180 000	900 000

QUESTION 43

Which one of the following statements is correct?

- (1) The contribution of Dan CC is R3 000 000
- (2) The contribution of Goli Ltd is R700 000
- (3) The contribution of Dan CC is R500 000
- (4) The operating leverage of Dan CC is 2,50
- (5) The operating leverage of Dan CC is 1,40

QUESTION 44

Which one of the following statements is correct?

- (1) Dan CC is more at risk to negative market changes because it has a lower profit.
- (2) Dan CC is more at risk to negative market changes because it has a lower operating leverage.
- (3) Dan CC is more at risk to negative market changes because it has both a lower operating leverage and a lower profit.
- (4) Goli Ltd is more at risk to negative market changes because it has a higher profit.
- (5) Goli Ltd is more at risk to negative market changes because it has a higher operating leverage.

The following information must be used for purposes of answering questions 45 and 46, bearing in mind that questions must be considered independently from one another.

The raw material specification for product Toy shows that 2 units of Toy can be manufactured from the following mixture of raw materials:

Raw material	Quantity required (Kg)	Standard cost per Kg	Total material cost (R)
Rubber	1,5	5,00	7,50
Plastic	0,5	2,00	1,00
	2,0		8,50

During a particular production run, the following results were obtained:

Raw material used:	Quantity
Rubber	1 800 kg
Plastic	2 200 kg

QUESTION 45

Which one of the following alternatives represents the raw material mixture variance?

- (1) R3 600 Unfavourable
- (2) R5 550 Unfavourable
- (3) R3 600 Favourable
- (4) R7 800 Favourable
- (5) None of the above options

QUESTION 46

Three thousand (3 000) units (Toys) were completed during the production run. Which one of the following alternatives represents the raw material yield variance?

- (1) R650 Unfavourable
- (2) R4 250 Unfavourable
- (3) R6 500 Unfavourable
- (4) R10 750 Unfavourable
- (5) None of the above options

QUESTION 47

Consider the following statements:

1. The mission of an organisation describes in very general terms the broad purpose and reason for an organisations existence.
2. Strategic planning begins with the specification of objectives towards which future operations should be directed.
3. Corporate objectives relate to the specific objectives of individual units within the organisation, such as a division or one company within a holding company.
4. Unit objectives are normally set for the organisation as a whole and are then translated into corporate objectives.

Which of the above statements is true?

- (1) All of the above statements
- (2) Statements 1 and 2
- (3) Statements 1, 2 and 3
- (4) Statements 1, 2 and 4
- (5) None of the above options

QUESTION 48

Which one of the following is not considered as a holding cost?

- (1) Incremental material holding costs
- (2) Cost of obsolescence and deterioration of inventory
- (3) Opportunity cost of investment in inventories
- (4) Incremental cost of placing an order
- (5) None of the above

QUESTION 49

Falcon Limited operates three divisions from their head office in Cape Town. Organisational overheads relating to head office costs are charged to the divisions based on their turnover. One of these divisions has been making losses for the past two financial years. A decision needs to be taken on whether or not to close it down. In your decision, allocated general expenses from head office will be:

- (1) Included because they represent the division's fair share of costs
- (2) Included because they are incremental
- (3) Ignored because they are not caused/incurred by the division
- (4) Ignored because they are fixed
- (5) None of the above options

QUESTION 50

Shearwater Limited has to decide on the optimal product mix for the next period. During this period, machine time will be limited to 1 500 hours. You have been provided with the following information:

Product	Demand (units)	Machine time per unit (minutes)	Contribution per unit (R)
Product A	1 800	30	1 500
Product B	600	45	1 200
Product C	1 275	67,5	1 912,50

Total budgeted fixed costs for the next period amount to R1 275 000. The optimal product mix for the next year is:

- (1) 1 275 units of Product C and 131 units of product A
- (2) 1 275 units of Product C and 132 units of Product A
- (3) 1 800 units of Product A and 533 units of Product C
- (4) 1 800 units of Product A and 534 units of Product C
- (5) None of the above options

