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# Charles Darwin University

Final Examination

Family Name

Given Name/s

Student Number

Teaching Period

Semester 2 Special/Summer Semester, 2017

	DURATION				
ACT202 – Management Accounting	Reading Time:	10 minutes			
	Writing Time:	<b>180</b> minutes			
INSTRUCTIONS	TO CANDIDATES				
<ol> <li>This exam paper contains six questions, all questions must be attempted.</li> <li>For calculation questions points are given for the quality of your calculations formats even if your final calculations are not correct.</li> <li>Make sure your name and student number appears in the cover page         It is student's responsibility to be aware of the university policy on plagiarism.     </li> </ol>					
EXAM CO	NDITIONS				
You may begin writing from the commencement of the exprovided as a guide only.	camination session. The rea	ading time indicated above is			
This is a RESTRICTED OPEN BOOK examination					
Any non-programmable calculator is permitted	Any non-programmable calculator is permitted				
No handwritten notes are permitted	No handwritten notes are permitted				
Hard copy, unannotated English translation dictionary only					
ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MA	TERIALS TO BE SUPPLIED			
No additional printed material is permitted	1 x 8 Page Book 1 x Scrap Paper				

# THIS EXAMINATION IS PRINTED DOUBLE-SIDED.

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# Question One (20 Marks)

Smith & Partners is a law firm specialising in commercial law. The firm currently has 210 clients, and employs 29 personnel (7 partners and 22 associates) to serve them. After a review of existing job-costing system, Jo Smith the founder of the firm believes two direct cost categories (professional partner and associate) and two indirect cost categories (general and secretary support) provide accurate costing for the firm. Following budgeted information for 2016 provides details on cost categories:

	Partner	Associate
Number of professionals	7	22
Hours of billable time per each personnel	1800 per year	1800 per year
Total compensation on average	\$381,600	\$135,000

	General	Secretary
Total cost	\$2, 100,000	\$700,000
Cost-allocation base	Total professional hours	Partner labour hours

The following information is available on the job completed for two of their clients Spartan Australia and Oceanea Pty Ltd:

Spartan Australia		Oceanea Pty Ltd		
Partners	70 hours	40 hours		
Associates	45 hours	130 hours		

#### Required:

- 1. Calculate the 2016 budgeted direct cost rates for
  - a. Partners (3 marks)
  - b. Associates (2 marks)
- 2. Calculate the 2016 budgeted indirect cost rates for
  - a. General support (1.5 marks)
  - b. Secretary support (1.5 marks)
- 3. Calculate the budgeted costs for the Spartan Australia and Oceanea Pty Ltd (10 marks).
- 4. Briefly describe how actual costing might differ from Normal costing in Smith and Partners (2 marks).

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# Question Two (17 marks)

Shiny Shoes is shoes retailer that operates in Melbourne. Elli Holland is the manager of this business and she needs to make a decision how much shelf space to devote to four different types of shoes they import. Following data is available:

	Children	Men	Women	Sport
Selling price per for a pair of	\$21	\$23	\$30	\$39
shoes				
Variable cost per pair of shoes	\$15.50	\$18.4	\$22.75	\$27.60
Pair of shoes sold per metre of	28	25	5	7
shelf space per day				

There is a maximum front shelf space of 13 meters to devote to the four styles of shoes. Elli wants a minimum of one metre and a maximum of seven metres of front shelf for each drink.

#### Required:

- 1. Calculate the contribution margin per a pair of each type of shoes (2 marks).
- 2. Conduct an evaluation of the situation where Elli maximises the shelf space devoted to the shoes with the highest contribution margin per case (8 marks).
- 3. What shelf space allocation for the four shoes would you recommend for the Shiny Shoes? Show your calculations (7 marks).

# Question Three (14 Marks)

Cathy Smith is the owner of Koka Kola Pty Ltd that manufactures two types of fizzy drinks: Fnergy (one litre disposable plastic bottle) and 1.5 litre reusable plastic container called Dnergy.

#### Required:

1. For 2016, Koka Kola's marketing manager projects monthly sales of 350,000 Fnergy (a the selling price of \$1.20) and 82,000 Dnergy (at the selling price of \$2.10). Prepare a revenue budget for Koka Kola for the year ending 31 December 2016 (4 marks).

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- 2. Koka Kola begins 2016 with 750,00 Fnergy in inventory. The operations manager requests that Fnergy bottles ending inventory on 31 December 2016 be no less than 495,000. Based on sales projections as budgeted above what is the minimum number of Fnergy bottles that the company must produce during 2016? (4 marks).
- 3. Cathy Smith plans to produce a Master Budget this year. Explain to her what is mean by a master budget? (3 marks)
- 4. Describe kaizen budgeting (3 marks).

# Question Four (18 Marks)

Smart Pens manufactures writing pens. For February, it budgeted to purchase and use 2100 kg of row material at @\$1.00 a kilogram. The company has switched to a different supplier that provides higher quality material at a price of \$1.10 a kilogram. The actual purchases for February were 1980 kg. The company budgeted for 54300 pens, but actual output was 51200 pens.

#### Required:

- 1. Calculate the flexible-budget variance (5 marks)
- 2. Calculate the price and efficiency variances (5 marks)
- 3. Comment on the above results and provide a possible explanation for them (4.5 marks)
- 4. Briefly explain the key differences between a static budget and a flexible budget (3.5 marks)

## Question Five (15 marks)

#### Part A (6 marks)

Greenroad Ltd provides management consulting services to the variety of clients. The company operates with two support departments namely administrative services (AS) and Information Systems (IS). There are two operating departments Government Consulting (GOVT) and Corporate Consulting (CORP). For the first quarter of 2014, Greenroad's cost records indicate the following:

	Support		Operating		
	AS	IS	GOVT	CORP	TOTAL
Budgeted overhead costs before any interdepartment cost allocations	\$630,000	\$2,420,000	\$8,810,000	\$12,550,000	\$27,460,000
Support work supplied by AS (budgeted head count)	-	25%	40%	35%	100%

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Support work supplied by IS	10%	-	30%	60%	100%
9budgeted computer time)					

#### Required:

Allocate the two support departments' costs to the two operating departments using the following methods:

- a) Direct method (3 marks)
- b) Step-down method (allocate AS first) (3 marks)

#### Part B (9 marks)

- I. Define a cost object and provide three examples (2 marks).
- II. List the six step in estimating the cost function on the basis of analysis of a past cost relationship (3 marks)
- III. Describe the assumptions underlying CVP analysis (4 marks)

# Question Six (16 Marks)

Smart Travel offers a bus service from north rural area to Sydney. Each of 12 buses that they operate with, makes between 1000 to 2000 round-trips annually. The records indicate that a bus that has made 1000 round-trips in the year incurs an average operating cost of \$360 per round-trip, and one that has made 2000 round-trips in the year incurs an average operating cost of \$295.00 per round-trip.

#### Required:

- 1. Using the high-low method, estimate the linear relationship Y= a + bX, where Y is the total annual operating cost of a bus and X is the number of round-trips to Sydney during the year (4 marks).
- 2. Give examples of costs that would be included in 'a' and 'b'. (3 marks)
- 3. If Smart Travel expects each bus to make, an average of 1220 round-trips in the coming year, what should the estimated operating budget for the bus fleet be? (3 marks)

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ioma	ester 2 Special/Summer Semester, 2017 FINAL EXAMINATION Page 7 of 7
5.	Name four approaches to estimating a cost function that Smart Travel might take (2 marks)
_	cost function (4 marks).
4.	What two assumptions the management team of Smart Travel must make when estimating a
4	What two assumptions the management team of Smart Travel must make when estimating