

- 4 D Limited is a large company and operates from several sites. It uses different systems of costing for its different sites.

**REQUIRED**

(a) State **three** advantages to a business of using a system of absorption costing.

1 .....

.....

.....

2 .....

.....

.....

3 .....

.....

.....

[3]

**Additional information**

At one of its sites the company specialises in printing brochures and leaflets for local organisations. At this site it uses a system of absorption costing.

There are two production departments: Assembly and Printing and two service departments: Technical support and Personnel.

The following information is available.

	Production departments		Service departments	
	Assembly	Printing	Technical support	Personnel
Floor area (square metres)	90	70	15	5
Power (kilowatt-hours)	120	320	40	20
Replacement cost of machinery and equipment (\$)	105 000	30 000	12 000	3 000
Number of employees	20	15	5	
Technical support hours	400	60		

The following budgeted overhead costs for August 2019 are still to be apportioned.

	\$
Electricity	20 500
Insurance of machinery	7 500
Insurance of buildings	11 880

**REQUIRED**

- (b) Complete the following table to show the apportionment of budgeted overhead costs for August 2019.

Apportionment of overheads

		Production departments		Service departments	
	Total \$	Assembly \$	Printing \$	Technical support \$	Personnel \$
Overheads already apportioned	40 210	17 530	11 360	5020	6300
Electricity					
Insurance of machinery					
Insurance of buildings					
Total overheads apportioned					
Reapportionment of personnel overheads					
Reapportionment of technical support overheads					

### Additional information

The following budgeted information is also available for August 2019.

	Assembly	Printing
Direct labour hours	3200	2000
Direct machine hours	1400	5500

### REQUIRED

- (c) Calculate an overhead absorption rate for **each** production department using an appropriate basis.

.....

.....

.....

.....

.....

.....

.....

..... [4]

### Additional information

The company received an order for a set of brochures to be produced in August 2019. It was budgeted that this order would require the following:

Direct material and labour cost	\$1330
Direct labour hours	
Assembly department	12.5 hours
Printing department	7.2 hours
Machine hours	
Assembly department	5.5 hours
Printing department	6.0 hours

The company requires a profit margin of 25% on all orders.

## REQUIRED

(d) Calculate the budgeted profit on this order.

.....

.....

.....

.....

.....

.....

.....

..... [4]

## Additional information

The actual time taken in each production department for this order was as follows:

	Assembly department	Printing department
Direct labour hours	11	6.5
Machine hours	6	8

## REQUIRED

(e) Calculate the **total** over or under-absorption of overheads **for this order**. Clearly show in your workings over-absorption or under-absorption of overheads in **each** department.

.....

.....

.....

.....

.....

.....

.....

..... [5]

At a second site, D Limited manufactures garden chairs and uses a system of marginal costing. There are three models: basic, super and deluxe. Total budgeted fixed costs per annum are \$234 000. Budgeted direct labour hours are 156 000 per annum. Fixed overhead costs are absorbed on the basis of direct labour hours.

	Basic	Super	Deluxe
Contribution per chair	\$3	\$9	\$12
Direct labour hours per chair	3	4.5	5.5

## REQUIRED

- [7