4 T Limited manufactures goods at two factories: Factory A and Factory B.

Factory A

Factory A has two production departments, Assembly and Finishing; and two service departments, Administration and Canteen.

Absorption costing is used at this factory.

Budgeted overheads for February 2021 have already been apportioned.

The basis for reapportioning the service department overheads is as follows:

	Production departments		Service departments	
	Assembly	Finishing	Administration	Canteen
Canteen	50%	40%	10%	-
Administration	75%	25%	-	-

REQUIRED

(a) Prepare a statement showing the reapportionment of service department overheads for February 2021.

	Production departments		Service departments	
	Assembly	Finishing	Administration	Canteen
	$	$	$	$
Overheads	83 500	70 100	28 300	15 400
Reapportionment of canteen				
Subtotal				
Reapportionment of administration				
Total overheads				

[4]

Additional information

	Assembly	Finishing
Direct labour hours per month	1700	1400
Machine hours per month	2800	900
Direct labour rate per hour	$8.40	$8.20

REQUIRED

(b) Calculate the overhead absorption rate for each production department to **two** decimal places.

Assembly department

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Finishing department

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Additional information

The company received an order from a customer. The following details are available:

Direct materials	$1880
Direct labour:	
Assembly department	11.5 hours
Finishing department	6.1 hours
Machine hours:	
Assembly department	5.7 hours
Finishing department	2.4 hours

The company's policy is to achieve a profit of 40% on selling price.

REQUIRED

(c) Prepare a statement to show the total selling price that T Limited will quote to the customer.

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(d) State **two** possible causes of under absorption of overheads.

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(e) State what is meant by

(i) allocation of overheads

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(ii) apportionment of overheads

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Additional information

Factory B

T Limited manufactures a single product in Factory B.

Marginal costing is used at this factory.

The following information is available for December 2020 when production was 9000 units which included 1000 units produced using overtime.

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Direct materials	72 000
Direct labour	74 000
Other variable costs	22 500
Fixed costs	65 000
Total costs	233 500

Direct labour overtime is paid at 1.25 times the normal rate.

All production was sold at $30 per unit.

The directors have been considering changing the supplier of materials. The following information is available.

1 An overseas supplier is prepared to become the company's sole supplier of materials at $5.50 per unit including delivery costs.

2 The supplier can only provide sufficient materials for the company to make 7600 units per month.

3 The directors do not expect any other costs or the unit selling price to change. All production will be sold.

REQUIRED

(f) Calculate the maximum profit per month that can be made if materials were obtained from the overseas supplier and production limited to 7600 units.

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(g) Advise the directors whether or not they should change the supplier. Justify your advice by considering **both** financial and non-financial factors.

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