# Lecture 5 Questions

## Question One

(From Drury, Review Problem 2.20, p.44; and reproduced below.)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Data |  |  |  |  |  |  | (£) |
| Maintenance annual service costing | | | |  |  |  | 220 |
| Spares/replacement parts, per 1,000 miles | | | | |  |  | 20 |
| Vehicle licence, per annum | | |  |  |  |  | 80 |
| Insurance, per annum | | |  |  |  |  | 250 |
| Petrol, per gallon | |  |  |  |  |  | 1.9 |
| Average mileage from one gallon is 25 miles. | | | | |  |  |  |

1. From the above data you are required:
2. to prepare a schedule to be presented showing for the mileage of 5,000, 10,000 and 30,000 miles per annum:
3. total variable cost
4. total fixed cost
5. total cost
6. variable cost per mile (in pence to nearest penny)
7. fixed cost per mile (in pence to nearest penny)
8. total cost per mile (in pence to nearest penny)
9. ‘The more miles you travel, the cheaper it becomes.’ Comment briefly on this statement.

## Question Two

Coburg Ltd operates 5 garages in South Yorkshire. The company has recently rebranded after running a successful advertising campaign. The following information shows the results for the last financial year and your own estimate of the profit improvement that will flow from the rebranding.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Profit/(loss) after charging Coburg fixed costs  £ | Allocation of Coburg fixed costs  £ | Expected profit improvement this year if store is rebranded  £ |
| Garage A | (20,000) | 15,000 | 15,000 |
| Garage B | (12,000) | 15,000 | 3,000 |
| Garage C | (4,500) | 10,000 | 4,000 |
| Garage D | (22,000) | 10,000 | 2,000 |
| Garage E | (14,000) | 15,000 | 8,000 |
| **Total** | **(72,500)** | **65,000** | **32,000** |

Further information is that the basis of allocation of Coburg’s central fixed costs among stores will not change. Moreover, store closures will not affect such costs.

**Required**:

Determine which garage if any should be closed, showing any relevant calculations.

## Question Three

Venetian Ltd, a company specialising in the manufacture of blinds has the following costs for the metal wall brackets:

£

Direct Materials (DM) £10

Direct Labour (DL) (2 hours) £12

Variable overheads (V. OH) £4

£26

The budgeted annual fixed costs are £80,000 and the normal activity level for a period is 4000 units.

Venetian Ltd has received a quotation from an outside supplier to supply the wall brackets at £30 per unit.

If the part is outsourced, the fixed cost for the period will be reduced by £30,000, but an extra £2 per unit will be incurred on transport cost.

**Required**

* Show whether the product should be outsourced at the current activity levels of 4000.
* How would your answer differ if the activity level was 3,0000units and 7,000 units.

## Question Four

Colour Ltd makes three types of stained glass window, red, blue and white. Colour limited presents the following cost statement and suggests the production of the red stained glass window should cease.

Red Blue White Total

£000 £000 £000 £000

Sales 40 50 45 135

Less: VC 30 26 24 80

Less: FC (45,000 x 1/3) 15 15 15 45

Profit (loss) (5) 9 6 10

**Required**

Comment on the decision to cease production of red stained glass windows.

## Question Five

Coley Ltd is an engineering firm. It is the largest supplier of a particular tool in a market where, at a standard price of £500, there is very little competition. The home market is reaching saturation point, but Coley is not yet working at full capacity. Present output is 1,500 units where full capacity is 2,500 units.

An order for 500 units has been received from an Italian firm on condition that the tools can be delivered to their factory at a price of £400 each

Coley Ltd’s present cost structures are:

£

Direct Materials 120

Direct labour 100

Variable overheads 60

Fixed overheads 300,000

However, to these must be added the costs associated with exporting to Italy. A sum of £20,000 is thought to be appropriate to cover this order.

**Required**

* Use appropriate financial calculations to demonstrate whether the decision to accept the order is justified.
* Suggest three other reasons for accepting the order.
* Suggest one problem that might be encountered if the order is accepted.