

QUESTION ONE

You have recently overheard the following remarks:

- a) 'When calculating variances, we in effect ignore differences of volume output, between original budget and actual, by flexing the budget. If there were a volume difference, it is water under the bridge by the time that the variances come to be calculated.' **(6 Marks)**
- b) 'It is very valuable to calculate variances because they will tell you what went wrong.' **(6 Marks)**
- c) 'All variances should be investigated to find their cause.' **(6 Marks)**
- d) 'Research evidence shows that the more demanding the target, the more motivated the manager.' **(6 Marks)**
- e) 'Most Businesses do not have feedforward controls of any type, just feedback controls through budgets.' **(6 Marks)**

(Total = 30 Marks)

1 Mark for each valid point for each of the 5 statements above.

Q2 a) $y = ax^b$

$y = 40(14)^{-0.322}$

$y = 17.1 \text{ hrs}$

Total time $17.1 \times 14 = 239.4 \text{ hrs}$
 Time taken so far 240.

5 Marks

80% is therefore a reasonable estimate

b) Cost of 30 units:

$y = 40(30)^{-0.322}$

$y = 13.38 \text{ hrs}$

Total time $30 \times 13.38 = 401.40 \text{ hrs}$

15 Marks

Material	$1 \times 30 \times 30$	=	900
Labour	$£6 \times 401.40$	=	2,408.4
Variable	$£0.50 \times 401.40$	=	200.7
Fixed			

Total Cost 3,509.10

c) 2 Marks for each valid point in respect of the benefits of the learning curve. (15 Marks)

Total 35 Marks

Q3. a). Absorption rate $\frac{\text{£ } 1,000,000}{500,000} = \text{£ } 2$ Per Machine Hour

Product	Basic	Super
Labour	20	30
Material	15	20
Overheads	17.50	30
	<u>52.50</u>	<u>80</u>
Mark Up 25%	13.125	20
Selling Price	<u>65.625</u>	<u>100</u>

10 Marks

b) Cost Drivers:

Machine Set Ups	$\frac{280,000}{100} = \text{£ } 2,800$
Quality Inspections	$\frac{220,000}{2,000} = \text{£ } 110$
Sales Orders	$\frac{240,000}{5,000} = \text{£ } 48$
General Production	$\frac{260,000}{500,000} = \text{£ } 0.52$

Q3 b) Cont'd

15
Marks

Product	Basic	Super
Labour	20	30
Materials	15	20
Machine Set up	1.40	22.40
Quality	1.375	16.50
Sales Orders	1.80	16.80
Production	<u>4.55</u>	<u>1.80</u>
Total Cost	44.125	113.50
Mark up 25%	11.03125	28.375
Selling Price	55.15625	141.875

c) 1 Mark for each valid conclusion drawn from the calculations in parts (a) & (b)
(10 Marks)