

THE TRAINING PLACE OF EXCELLENCE

Cost and Revenues

Practice Assessment: Answers

Task 1

(a) The EOQ is

$$\sqrt{\frac{2 \times 2 \times 1,250,000}{5}} = 1,000\text{kg}$$

(b) and (c)

Inventory record for ZYQ

Date	Receipts			Issues			Balance	
	Qty (kg)	Cost per kg (£)	Total cost (£)	Qty (kg)	Cost per kg (£)	Total cost (£)	Qty (kg)	Total cost (£)
Balance as at 22 April							900	1,125
24 April	1,000	1.275	1,275				1,900	2,400
26 April				800	1.263	1,010	1,100	1,389
28 April	1,000	1.475	1,475				2,100	2,864
30 April				750	1.364	1,023	1,350	1,841

(d) £1,000

(e) £1,020

Task 2

Transaction 1	Dr. Inventory, Cr. Trade payables' Control
Transaction 2	Dr. Production, Cr. Inventory
Transaction 3	Dr. Inventory, Cr. Bank
Transaction 4	Dr. Inventory, Cr. Production

Task 3

Employee's weekly timesheet for week ending 7 April

Employee: G. Michael			Cost Centre : Assembly; Basic pay per hour: £12.00			
	Hours spent on production	Hours worked on indirect work	Notes	Basic pay (£)	Overtime premium (£)	Total pay (£)
Monday	6	2	10am- 12am cleaning of machinery	96	12	108
Tuesday	2	4	9am-1pm customer care course	72	-	72
Wednesday	8			96	12	108
Thursday	6			72	-	72
Friday	6	1	3-4pm health and safety training	84	6	90
Saturday	6			72	36	108
Sunday	3			36	36	72
Total	37	7		528	102	630

Task 4

	Basis	Assembly (£)	Finishing (£)	Maint'ce (£)	Stores	Admin	Total
Depreciation of machinery	NBV	682,395	292,455				974,850
Power for machinery	KwH	324,600	216,400				541,000
Rent and rates	M ²	30,000	27,000	18,000	17,400	12,600	105,000
Light and heat	M ²	6,060	5,454	3,636	3,514.80	2,545.20	21,210
Indirect labour	All			101,150	36,050	240,100	377,300
Totals		1,043,055	541,309	122,786	56,964.80	255,245.20	2,019,360
Reapportion Maintenance		95,773.08	27,012.92	(122,786)			
Reapportion Stores		39,875.36	17,089.44		(56,964.8)		
Reapportion Admin		127,622.60	127,622.60			(255,245.2)	
Total overheads to production centres		1,306,326.04	713,033.96				2,019,360

Task 5

The correct answer is A

The correct answer is C

The correct answer is D

Task 6

Batches produced and sold	1,500	1,800	2,000
	£	£	£
Sales Revenue	45,000	54,000	60,000
Variable costs:			
Direct materials	7,500	9,000	10,000
Direct Labour	9,000	10,800	12,000
Overheads	6,000	7,200	8,000
Semi-variable costs	11,000		
Variable element		3,600	4,000
Fixed element		8,000	8,000
Total cost	33,500	38,600	42,000
Total profit	11,500	15,400	18,000
Profit per batch (to 2 decimal places)	7.67	8.56	9.00

Task 7

(a) 6,000 units

(b) £312,000

(c)

Units of ZYQ sold	8,000	9,000
	£	£
Margin of safety (units)	2,000	3,000
Margin of safety percentage	25%	33%

(d) 7,500 units

(e) The correct answer is A.

Task 8

Description	Kg	Unit cost (£)	Total cost (£)	Description	Kg	Unit cost (£)	Total cost (£)
Material ZY1	400	1.66	664	Normal loss	36	0.50	18
Material ZY2	300	1.50	450	Output	850	9.50	8,075
Material ZY3	200	0.60	120	Abnormal loss	14	9.50	133
Labour			2,736				
Overheads			4,256				
	900		8,226		900		8,226

	Debit	Credit
Abnormal loss		✓
Abnormal gain	✓	

Task 9

	Flexed	Actual	Variance	F/ A
Volume sold	12,000	12,000		0
	£000	£000	£000	
Sales revenue	2,400	2,500	100	F
Less costs:				
Direct materials	420	415	5	F
Direct labour	480	435	45	F
Overheads	980	1,180	200	A
Operating profit	520	470	50	A

Task 10

	Year 0 (£000)	Year 1 (£000)	Year 2 (£000)	Year 3 (£000)
Capital expenditure	(1,900)			
Sales income		1,620	1,860	2,300
Operating costs		(1,120)	(1,150)	(1,190)
Net cash flows	(1,900)	500	710	1,110
PV factors	1.0000	0.8696	0.7561	0.6575
Discounted cash flow	(1,900)	435	537	730
Net present value	(198)			

The net present value is **negative**.

The payback period is **2 years and 8 months**.

Year	Cash flow	Cumulative cash flow
0	(1,900)	(1,900)
1	500	(1,400)
2	710	(690)
3	1,110	(420)

$(690/1,110) \times 12 = 7.5$ months