Mock Assessment 1

Mock Assessment 1

Certificate in Business Accounting
Fundamentals of Management Accounting

You are allowed two hours to complete this assessment.

The assessment contains 50 questions.

All questions are compulsory.

Do not turn the page until you are ready to attempt the assessment under timed conditions.

Mock Assessment Questions

Question 1

Which ONE of the following would be classified as direct labour?

- ☐ Personnel manager in a company servicing cars.
- ☐ Bricklayer in a construction company.
- ☐ General manager in a DIY shop.
- ☐ Maintenance manager in a company producing cameras.

Question 2

The principal budget factor is the

- ☐ factor which limits the activities of the organisation and is often the starting point in budget preparation.
- ☐ budgeted revenue expected in a forthcoming period.
- ☐ main budget into which all subsidiary budgets are consolidated.
- ☐ overestimation of revenue budgets and underestimation of cost budgets, which operates as a safety factor against risk.

Question 3

R Ltd absorbs overheads based on units produced. In one period, 110,000 units were produced and the actual overheads were £500,000. Overheads were £50,000 over-absorbed in the period.

The overhead absorption rate was £ ☐ per unit.

Question 4

X operates an integrated cost accounting system. The Work-in-Progress Account at the end of the period showed the following information:

Work-in-Progress Account

	$		$
Stores ledger a/c	100,000	?	200,000
Wage control a/c	75,000		
Factory overhead a/c	50,000	Balance c/d	25,000
	225,000		225,000

The $200,000 credit entry represents the value of the transfer to the

- ☐ Cost of sales account.
- ☐ Material control account.
- ☐ Sales account.
- ☐ Finished goods inventory account.

Question 5

X Ltd absorbs overheads on the basis of machine hours. Details of budgeted and actual figures are as follows:

	Budget	*Actual*
Overheads	£1,250,000	£1,005,000
Machine hours	250,000 hours	220,000 hours

(a) Overheads for the period were:

under-absorbed ☐
over-absorbed ☐

(b) The value of the under/over absorption for the period was £ ☐.

Question 6

In an integrated bookkeeping system, when the actual production overheads exceed the absorbed production overheads, the accounting entries to close off the production overhead account at the end of the period would be:

	Debit	*Credit*	*No entry in this account*
Production overhead account	☐	☐	☐
Work in progress account	☐	☐	☐
Income statement	☐	☐	☐

Question 7

A retailer uses a Last In First Out (LIFO) inventory valuation system. Movements of item M for February are as follows.

		Units	*£ per unit*
1st February	Opening inventory balance	230	7.80
3rd February	Receipts	430	7.95
8th February	Issues	370	
14th February	Issues	110	
22nd February	Receipts	400	8.01

No other movements of item M occurred during the month.

(a) The value of the closing inventory of item M at the end of February is £ ☐
(b) All units of item M were sold for £14 each. The gross profit achieved on item M during February was £ ☐.

Question 8

A Limited has completed the initial allocation and apportionment of its overhead costs to cost centres as follows.

Cost centre	*Initial allocation*
	£000
Machining	190
Finishing	175
Stores	30
Maintenance	25
	420

The stores and maintenance costs must now be reapportioned taking account of the service they provide to each other as follows.

	Machining	*Finishing*	*Stores*	*Maintenance*
Stores to be apportioned	60%	30%	–	10%
Maintenance to be apportioned	75%	20%	5%	

After the apportionment of the service department costs, the total overhead cost of the production departments will be (*to the nearest £000*):

Machining £ ☐
Finishing £ ☐

Question 9

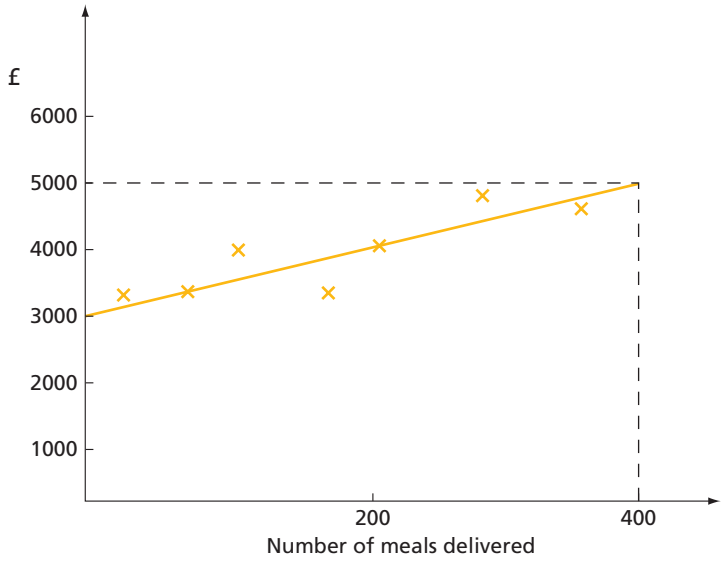
The budgeted contribution for R Limited last month was £32,000. The following variances were reported.

Variance	£	
Sales volume contribution	800	adverse
Material price	880	adverse
Material usage	822	favourable
Labour efficiency	129	favourable
Variable overhead efficiency	89	favourable

No other variances were reported for the month.
The actual contribution earned by R Limited last month was £ ☐.

Question 10

The following scattergraph has been prepared for the costs incurred by an organisation that delivers hot meals to the elderly in their homes.



Based on the scattergraph:
(a) the period fixed cost is £ ☐
(b) the variable cost per meal delivered is £ ☐.

Question 11

A company operates a differential piece-rate system and the following weekly rates have been set:

1–500 units	£0.20 per unit in this band
501–600 units	£0.25 per unit in this band
601 units and above	£0.55 per unit in this band

Details relating to employee A for the latest week are shown below:

Employee A	
Actual output achieved	800 units
Actual hours worked	45

There is a guaranteed minimum wage of £5 per hour for a 40-hour week paid to all employees.

The amount payable (to the nearest £) to employee A is £ ☐.

Question 12

Overtime premium is

☐ the additional amount paid for hours worked in excess of the basic working week.
☐ the additional amount paid over and above the normal hourly rate for hours worked in excess of the basic working week.

☐ the additional amount paid over and above the overtime rate for hours worked in excess of the basic working week.

☐ the overtime rate.

The following information is required for Questions 13 and 14

X Ltd has two production departments, Assembly and Finishing, and one service department, Stores.

Stores provide the following service to the production departments: 60 per cent to Assembly and 40 per cent to Finishing.

The budgeted information for the year is as follows:

Budgeted production overheads:

Assembly	£100,000
Finishing	£150,000
Stores	£50,000

Budgeted output 100,000 units

Question 13

The budgeted production overhead absorption rate for the Assembly Department will be £ ☐ per unit.

Question 14

At the end of the year, the total of all of the production overheads debited to the Finishing Department Production Overhead Control Account was £130,000, and the actual output achieved was 100,000 units.

(a) The overheads for the Finishing Department were:

under-absorbed ☐
over-absorbed ☐

(b) The value of the under/over absorption was £ ☐.

Question 15

R Ltd has been asked to quote for a job. The company aims to make a profit margin of 20% on sales. The estimated total variable production cost for the job is £125.

Fixed production overheads for the company are budgeted to be £250,000 and are recovered on the basis of labour hours. There are 12,500 budgeted labour hours and this job is expected to take 3 labour hours.

Other costs in relation to selling, distribution and administration are recovered at the rate of £15 per job.

The company quote for the job should be £ ☐.

Question 16

Which of the following would NOT be included in a cash budget? Tick all that would NOT be included.

- ☐ Depreciation
- ☐ Provisions for doubtful debts
- ☐ Wages and salaries

The following information is required for Questions 17 and 18

X is preparing its budgets for the forthcoming year.
The estimated sales for the first 4 months of the forthcoming year are as follows:

Month 1	6,000 units
Month 2	7,000 units
Month 3	5,500 units
Month 4	6,000 units

40% of each month's sales units are to be produced in the month of sale and the balance is to be produced in the previous month.

50% of the direct materials required for each month's production will be purchased in the previous month and the balance in the month of production.

The direct material cost is budgeted to be $5 per unit.

Question 17

The production budget for Month 1 will be ☐ units.

Question 18

The material cost budget for Month 2 will be $ ☐.

Question 19

When calculating the material purchases budget, the quantity to be purchased equals

- ☐ material usage + materials closing inventory − materials opening inventory
- ☐ material usage − materials closing inventory + materials opening inventory
- ☐ material usage − materials closing inventory − materials opening inventory
- ☐ material usage + materials closing inventory + materials opening inventory

Question 20

The following extract is taken from the overhead budget of X Ltd:

Budgeted activity	50%	75%
Budgeted overhead	£100,000	£112,500

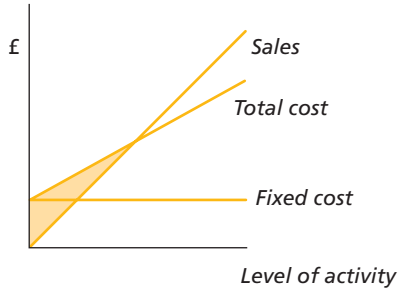
The overhead budget for an activity level of 80 per cent would be £ ☐.

Question 21

Which of the following would be included in the cash budget, but would not be included in the budgeted income statement? Tick all that are correct.

- ☐ Repayment of a bank loan.
- ☐ Proceeds from the sale of a non-current asset.
- ☐ Bad debts write off.

Question 22



(a) This graph is known as a

- ☐ semi-variable cost chart.
- ☐ conventional breakeven chart.
- ☐ contribution breakeven chart.
- ☐ profit volume chart.

(b) The shaded area on the graph represents:

- ☐ loss
- ☐ fixed cost
- ☐ variable cost
- ☐ profit

Question 23

The following details have been extracted from the payables records of X:

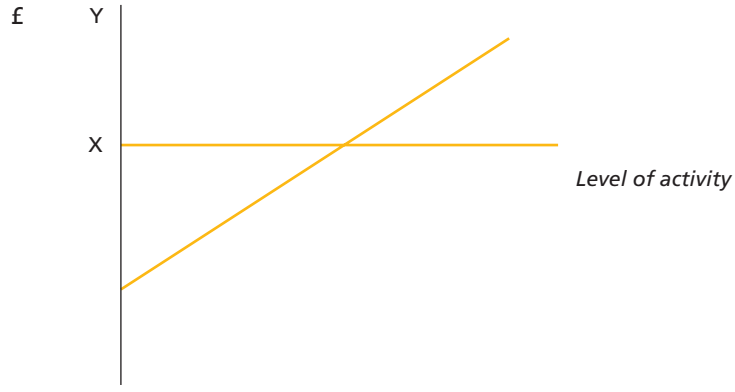
Invoices paid in the month of purchase	25%
Invoices paid in the first month after purchase	70%
Invoices paid in the second month after purchase	5%

Purchases for July to September are budgeted as follows:

July	$250,000
August	$300,000
September	$280,000

For suppliers paid in the month of purchase, a settlement discount of 5 per cent is received. The amount budgeted to be paid to suppliers in September is $ ☐.

Question 24



The difference in the values (£) between point X and point Y on the profit volume chart shown above represents:

- ☐ contribution
- ☐ profit
- ☐ breakeven
- ☐ loss

Question 25

Which one of the following statements is correct:

- ☐ Job costing can only be applied where work is undertaken on the customer's premises
- ☐ Batch costing can only be applied where every unit in the batch is separately identifiable
- ☐ Contract costing can only be applied where every contract is separately identifiable

Question 26

In a standard cost bookkeeping system, when the actual material usage has been greater than the standard material usage, the entries to record this is in the accounts are:

	Debit	*Credit*	*No entry in this account*
Material usage variance account	☐	☐	☐
Raw material control account	☐	☐	☐
Work in progress account	☐	☐	☐

Question 27

R Ltd makes one product, which passes through a single process.

Details of the process for period 1 were as follows:

	£
Material cost – 20,000 kg	26,000
Labour cost	12,000
Production overhead cost	5,700
Output	18,800 kg
Normal losses	5% of input

There was no work-in-progress at the beginning or end of the period. Process losses have no value.

The cost of the abnormal loss (to the nearest £) is £ [ ].

The following information is required for Questions 28–35

X Ltd operates a standard costing system. The following budgeted and standard cost information is available:

Budgeted production and sales	10,000 units
	£ per unit
Selling price	250
Direct material cost – 3 kg × £10	30
Direct labour cost – 5 hours × £8	40
Variable production overheads – 5 hours × £4	20

Actual results for the period were as follows:

Production and sales	11,500 units
	£
Sales value	2,817,500
Direct material – 36,000 kg	342,000
Direct labour – 52,000 hours	468,000
Variable production overheads	195,000

For all calculated variances, tick the correct box to indicate whether the variance is adverse or favourable.

Question 28

The direct material price variance is £ [ ]

adverse ☐
favourable ☐

Question 29

The direct material usage variance is £ ☐

adverse ☐
favourable ☐

Question 30

The direct labour rate variance is £ ☐

adverse ☐
favourable ☐

Question 31

The direct labour efficiency variance is £ ☐

adverse ☐
favourable ☐

Question 32

The variable production overhead expenditure variance is £ ☐

adverse ☐
favourable ☐

Question 33

The variable production overhead efficiency variance is £ ☐

adverse ☐
favourable ☐

Question 34

The sales volume contribution variance is £ ☐

adverse ☐
favourable ☐

Question 35

The sales price variance is £ ☐

adverse ☐
favourable ☐

Question 36

X Ltd uses the FIFO method to charge material issue costs to production. Opening inventory of material M at the beginning of April was 270 units valued at £4 per unit.

Movements of material M during April were as follows.

4 April	Received 30 units at £4.10 per unit
9 April	Issued 210 units
14 April	Issued 80 units
22 April	Received 90 units at £4.20 per unit
24 April	Issued 40 units

(a) The total value of the issues to production during April was £ ☐.
(b) The value of the closing inventory at the end of April was £ ☐.

Question 37

X Ltd manufactures a product called the 'ZT'. The budget for next year was:

Annual sales	10,000 units
	£ per unit
Selling price	20
Variable cost	14
Fixed costs	3
Profit	3

If the selling price of the ZT were reduced by 10 per cent, the sales revenue that would be needed to generate the original budgeted profit would be £ ☐.

Question 38

A company is faced with a shortage of skilled labour next period.

When determining the production plan that will maximise the company's profit next period, the company's products should be ranked according to their:

☐ profit per hour of skilled labour
☐ profit per unit of product sold
☐ contribution per hour of skilled labour
☐ contribution per unit of product sold

Question 39

Which of the following would contribute towards a favourable sales price variance (tick all that apply)?

(a) The standard sales price per unit was set too high ☐.
(b) Price competition in the market was not as fierce as expected ☐.
(c) Sales volume was higher than budgeted and therefore sales revenue was higher than budgeted ☐.

Question 40

R Ltd has the following year-end information regarding one of its long-term contracts:

	£
Revenue credited to income statement	2,500,000
Profit recognised	750,000
Cash received	1,875,000
Costs to date	2,200,000
Future costs	220,000

(a) The cost charged to the income statement in respect of this contract was £ [ ].
(b) The value of the contract receivable is £ [ ].

Question 41

The following data relate to a process for the latest period.

Opening work in progress	300 kg valued as follows Input material £1,000 Conversion cost £200
Input during period	8,000 kg at a cost of £29,475
Conversion costs	£11,977
Output	7,000 kg
Closing work in progress	400 kg

Closing work in progress is complete as to input materials and 70 per cent complete as to conversion costs.

Losses are expected to be 10 per cent of input during the period and they occur at the end of the process. Losses have a scrap value of £2 per kg.

The value of the completed output (to the nearest £) is £ [ ].

Question 42

Which of the following inventory valuation methods results in charges to cost of sales which are close to the economic cost?

First In, First Out (FIFO) ☐
Last In, First Out (LIFO) ☐
Average Cost (AVCO) ☐

Data for questions 43 and 44

A company makes a single product T and budgets to produce and sell 7,200 units each period. Cost and revenue data for the product at this level of activity are as follows.

	$ per unit
Selling price	53
Direct material cost	24
Direct labour cost	8
Other variable cost	3
Fixed cost	7
Profit	11

Question 43

The contribution to sales ratio (P/V ratio) of product T (to the nearest whole number) is ☐ per cent.

Question 44

The margin of safety of product T (to the nearest whole number) is ☐ per cent of budgeted sales volume.

Data for questions 45 and 46

The total figures from TY Division's budgetary control report are as follows.

	Fixed budget	*Flexed budget allowances*	*Actual results*
	$	$	$
Total sales revenue	520,000	447,000	466,500
Total variable cost	389,000	348,000	329,400
Total contribution	131,000	99,000	137,100

Question 45

(a) The sales price variance for the period is $ ☐ **adverse/favourable**

(b) The sales volume contribution variance for the period is $ ☐ **adverse/favourable**

Question 46

(a) The total expenditure variance for the period is $ ☐ **adverse/favourable**

(b) The total budget variance for the period is $ ☐ **adverse/favourable**

Question 47

In an integrated bookkeeping system, the correct entries to record the depreciation of production machinery are:

	Debit	*Credit*	*No entry in this account*
Depreciation of production machinery	☐	☐	☐
Work in progress account	☐	☐	☐
Production overhead control account	☐	☐	☐

Question 48

In an integrated bookkeeping system, the correct entries to record the issue of indirect materials for production purposes are:

	Debit	*Credit*	*No entry in this account*
Materials control account	☐	☐	☐
Work in progress account	☐	☐	☐
Production overhead control account	☐	☐	☐

Question 49

H Limited budgets to produce and sell 4,000 units of product H next year. The amount of capital investment required to support product H will be £290,000 and H Limited requires a rate of return of 14 per cent on all capital invested.

The full cost per unit of product H is £45.90.

To the nearest penny, the selling price per unit of product H that will achieve the specified return on investment is £ ☐.

Question 50

The Drop In Café sells specialist coffees to customers to drink on the premises or to take away.

The proprietors have established that the cost of ingredients is a wholly variable cost in relation to the number of cups of coffee sold whereas staff costs are semi-variable and rent costs are fixed.

Within the relevant range, as the number of cups of coffee sold increases (tick the correct box):

	increase	*decrease*	*stay the same*
(a) The ingredients cost per cup sold will	☐	☐	☐
(b) The staff cost per cup sold will	☐	☐	☐
(c) The rent cost per cup sold will	☐	☐	☐

First Mock Assessment – Solutions

Solution 1

Bricklayer in a construction company.

The bricklayer's wages can be identified with a specific cost unit therefore this is a direct cost. The wages paid to the other three people cannot be identified with specific cost units. Therefore they would be indirect costs.

Solution 2

The principal budget factor is the factor which limits the activities of the organisation and is often the starting point in budget preparation.

Solution 3

The overhead absorption rate was £5 per unit.

Workings:

	£
Actual overheads	500,000
Over-absorption	50,000
Overhead absorbed	550,000

Overhead absorption rate = £550,000/110,000 units = £5.

Solution 4

Finished goods inventory account.

Solution 5

Overheads for the period were *over-absorbed by £95,000.*

Workings:

Overhead absorption rate = £1,250,000/250,000 = £5 per hour

	£
Absorbed overhead = 220,000 hours × £5	1,100,000
Actual overhead incurred	1,005,000
Over-absorbed overhead	95,000

Solution 6

	Debit	*Credit*	*No entry in this account*
Production overhead account		✓	
Work in progress account			✓
Income statement	✓		

Solution 7

(a) The value of the closing inventory of item M at the end of February is £4,608

(b) All units of item M were sold for £14 each. The gross profit achieved on item M during February was £2,911.50.

Workings

	Receipts			*Sales*			*Balance*		
Date	*Qty*	*Price*	£	*Qty*	*Price*	£	*Qty*	*Price*	£
1 Feb							230	7.80	1,794.00
3 Feb	430	7.95	3,418.50				230	7.80	1,794.00
							430	7.95	3,418.50
							660		5,212.50
8 Feb				370	7.95	2,941.50	230	7.80	1,794.00
							60	7.95	477.00
							290		2,271.00
14 Feb				60	7.95	477.00			
				50	7.80	390.00			
				110		867.00	180	7.80	1,404.00
22 Feb	400	8.01	3,204.00				180	7.80	1,400.00
							400	8.01	3,204.00
							580		4,608.00

(b)

	£
Sales revenue (480 units × £14)	6,720.00
Cost of goods sold(2,941.50 + 867.00)	3,808.50
Gross profit	2,911.50

Solution 8

After the apportionment of the service department costs, the total overhead cost of the production departments will be (*to the nearest £000*):

Machining	£230,000
Finishing	£190,000

Workings

	Machining £000	*Finishing* £000	*Stores* £000	*Maintenance* £000
Apportioned costs	190.00	175.00	30.0	25.0
Stores apportionment	18.00	9.00	(30.0)	3.0
Maintenance apportionment	21.00	5.60	1.4	(28.0)
Stores apportionment	0.84	0.42	(1.4)	0.14
Maintenance apportionment	0.11	0.03	–	(0.14)
Total	229.95	190.05		

Solution 9

The actual contribution earned by R Limited last month was £31,360.

£(32,000 – 800 – 880 + 822 + 129 + 89) = £31,360.

Solution 10

(a) The period fixed cost is £3,000
(b) The variable cost per meal delivered is £5

Workings:

$$\text{Variable cost per meal} = \frac{£5{,}000 - £3{,}000}{400 \text{ meals}} = £5$$

Solution 11

The amount payable to employee A is £235.

Workings:

Units	£
500 × 20p	100
100 × 25p	25
200 × 55p	110
800	235

Solution 12

Overtime premium is the additional amount paid over and above the normal hourly rate for hours worked in excess of the basic working week.

Solution 13

The budgeted production overhead absorption rate for the Assembly Department will be £1.30 per unit.

Workings:	*Assembly*
	£
Budgeted overheads	100,000
Reapportioned stores overhead 60% × £50,000	30,000
Total budgeted overhead	130,000
Budgeted output	100,000
OAR =	£130,000
	100,000
	= £1.30 per unit

Solution 14

The overheads for the Finishing Department were *over-absorbed by £40,000*.

Workings:

	Finishing £
Budgeted overheads	150,000
Reapportioned stores overhead 40% × £50,000	20,000
Total budgeted overhead	170,000
Budgeted output	100,000
OAR =	£170,000 / 100,000
	= £1.70 per unit

	£
Absorbed overhead £1.70 × 100,000	170,000
Actual overhead incurred	130,000
Over-absorption	40,000

Solution 15

The company quote for the job should be *£250*.

Workings:

	Job quote £
Variable production costs	125
Fixed production overheads $\left(\frac{250,000}{12,500} \times 3\right)$	60
Selling, distribution and administration	15
Total cost	200
Profit margin 20%	50
Quote	250

Solution 16

Depreciation and provisions for doubtful debts are not cash flows and would not be included in a cash budget.

Solution 17

The production budget for month 1 will be *6,600 units*.

Workings:

	Month 1 *Units*	*Month 2* *Units*	*Month 3* *Units*	*Month 4* *Units*
Sales	6,000	7,000	5,500	6,000
Production				
40% in the month	2,400	2,800	2,200	2,400
60% in the previous month	4,200	3,300	3,600	
Production	6,600	6,100	5,800	

Solution 18

The material cost budget for Month 2 will be *$30,500*.

Workings:

Month 2 6,100 units produced @ $5 per unit = $30,500.

Solution 19

The quantity to be purchased equals material usage + materials closing inventory − materials opening inventory.

Solution 20

The overhead budget for an activity level of 80% would be *£115,000*.

Workings:
Using the high/low method

		£	
High	75%	112,500	
Low	50%	100,000	
Change	25%	12,500	– variable cost of 25%
	1%	500	– variable cost of 1%

Substitute into 75% activity	£
Total overhead	112,500
Variable cost element 75 × £500	37,500
Fixed cost element	75,000

Total overhead for 80% activity	
Variable cost element 80 × £500	40,000
Fixed cost element	75,000
Total overhead	115,000

Solution 21

The correct answers are:

– repayment of a bank loan
– proceeds from the sale of a non-current asset.

Both these items result in a cash flow and would therefore be included in the cash budget. However, they would not be included in the income statement. The bad debts write off would be included in the income statement, but not in the cash budget.

Solution 22

(a) The graph is known as a conventional breakeven chart.
(b) The shaded area on the breakeven chart represents *loss*.

Solution 23

The amount budgeted to be paid to suppliers in September is *$289,000*.

Workings:

	July	*August*	*September*
	$	$	$
Purchases	250,000	300,000	280,000
25% paid in the month of purchase	62,500	75,000	70,000
5% discount allowed	(3,125)	(3,750)	(3,500)
70% paid in the first month		175,000	210,000
5% paid in the second month			12,500
Budgeted payment			289,000

Solution 24

The difference in the values (£) between point X and point Y on the profit volume chart represents *profit*.

Solution 25

The correct statement is that contract costing can only be applied where every contract is separately identifiable. A separate account is maintained for each contract.

Job costing can be applied where work is undertaken on the organisation's own premises. For example job cost sheets can be used to collect the costs of the organisation's property repairs carried out by its own employees.

Batch costing can only be applied where every batch is separately identifiable, but the units within the batch will be identical.

Solution 26

	Debit	*Credit*	*No entry in this account*
Material usage variance account	✓		
Raw material control account			✓
Work in progress account		✓	

Solution 27

The cost of the abnormal loss is *£460*.

Workings:

	£
Direct material cost	26,000
Labour cost	12,000
Production overhead cost	5,700
	43,700

	Kg
Input	20,000
Normal loss	1,000
Expected output	19,000
Actual output	18,800
Abnormal loss	200

Cost per kg = £43,700/19,000 = £2.30
Cost of abnormal loss = £2.30 × 200 kg = £460.

Solution 28

The direct material price variance is *£18,000 favourable.*

Workings:

	£	
36,000 kg should cost (×£10)	360,000	
but did cost	342,000	
Variance	18,000	F

Solution 29

The direct material usage variance is *£15,000 adverse*.

Workings:

11,500 units should use (×3 kg)	34,500	kg
but did use	36,000	kg
Difference	1,500	kg
× std price per kg	×£10	
Variance	£15,000	A

Solution 30

The direct labour rate variance is *£52,000 adverse.*

Workings:

	£	
52,000 hours should cost (×£8)	416,000	
but did cost	468,000	
Variance	52,000	A

Solution 31

The direct labour efficiency variance is *£44,000 favourable*.

Workings:

11,500 units should take (×5 hours)	57,500	hours
but did take	52,000	hours
Difference	5,500	hours
× std rate per hour	× £8	
Variance	£44,000	F

Solution 32

The variable production overhead expenditure variance is *£13,000 favourable*.

Workings:

	£	
52,000 hours should have cost (× £4)	208,000	
but did cost	195,000	
Variance	13,000	F

Solution 33

The variable production overhead efficiency variance is *£22,000 favourable*.

Workings:

Variance in hours from labour efficiency variance	= 5,500	hours
× standard variable production overhead per hour	×£4	
Variance	£22,000	F

Solution 34

The sales volume contribution variance is *£240,000 favourable*.

Workings:

Actual sales volume	11,500	units
Budget sales volume	10,000	units
Variance in units	1,500	favourable
× standard contribution per unit £(250 – 30 – 40 – 20)	×£160	
Sales volume contribution variance	£240,000	favourable

Solution 35

The sales price variance is *£57,500 adverse*.

Workings:

	£	
11,500 units should sell for (×£250)	2,875,000	
But did sell for	2,817,500	
Sales price variance	57,500	adverse

Solution 36

(a) The total value of the issues to production during April was *£1,329*.
(b) The value of the closing inventory at the end of April was *£252*.

Workings:

			£
(a) Issues:	9 April	210 units × £4	840
	14 April	60 units × £4	240
		20 units × £4.10	82
	24 April	10 units × £4.10	41
		30 units × £4.20	126
			1,329

(b) Inventory = 60 units × £4.20 = £252

Solution 37

The sales revenue that would be needed to generate the original budgeted profit would be *£270,000*.

Workings:
Fixed costs are not relevant because they will remain unaltered.
Original budgeted contribution = 10,000 units × £(20 – 14) = £60,000
Revised contribution per unit = £(18 − 14) = £4
Required number of units to achieve same contribution = £60,000/£4 = 15,000 units
Required sales revenue = 15,000 units × £18 revised price = £270,000

Solution 38

When determining the production plan that will maximise the company's profit next period, the company's products should be ranked according to their contribution per hour of skilled labour.

Solution 39

Only reason (b) would contribute to a favourable sales price variance.

Reason (a) would result in an adverse variance. Reason (c) would not necessarily result in any sales price variance because all the units could have been sold at standard price.

Solution 40

(a) The cost charged to the income statement in respect of this contract was *£1,750,000*.

Workings:

	£
Revenue credited	2,500,000
Profit recognised	750,000
Cost charged	1,750,000

(b) The value of the contract receivable is *£625,000*.

Workings:

	£
Revenue credited	2,500,000
Less cash received	1,875,000
Receivable balance	625,000

Solution 41

The value of the completed output is £38,500

Workings:

				Equivalent kg	
				Input material	*Conversion costs*
Input	*kg*	*Output*	*kg*		
Opening WIP	300	Finished output	7,000	7,000	7,000
Input	8,000	Normal loss	800	–	–
		Abnormal loss	100	100	100
		Closing WIP	400	400	280
	8,300		8,300	7,500	7,380
		Costs	£	£	£
		Opening WIP	1,200	1,000	200
		Period costs	41,452	29,475	11,977
		Normal loss	(1,600)	(1,600)	–
			41,052	28,875	12,177
		Cost per equivalent kg	5.50	3.85	1.65

The value of the completed output is £5.50 × 7,000 kg = £38,500

Solution 42

The LIFO inventory valuation method results in charges to cost of sales which are close to the economic cost.

Solution 43

The contribution to sales ratio (P/V ratio) of product T is 34 per cent.

Workings:

Contribution per unit of product T = $(53 – 24 – 8 – 3) = $18

Contribution to sales ratio = 18/53 = 34%

Solution 44

The margin of safety of product T is 61 per cent of budgeted sales volume.

Workings:
Period fixed costs = 7,200 × $7 = $50,400

$$\text{Breakeven point} = \frac{\$50{,}400}{\$18} = 2{,}800 \text{ units}$$

Margin of safety = (7,200 – 2,800) units = 4,400 units
Margin of safety as percentage of budgeted sales = 4,400/7,200 = 61%

Solution 45

(a) The sales price variance is $(466,500 – 447,000) = $19,500 favourable
(b) The sales volume contribution variance is $(99,000 – 131,000) = $32,000 adverse

Solution 46

(a) The total expenditure variance is $(329,400 – 348,000) = $18,600 favourable
(b) The total budget variance is $(137,100 – 131,000) = $6,100 favourable

Solution 47

	Debit	*Credit*	*No entry in this account*
Depreciation of production machinery		✓	
Work in progress account			✓
Production overhead control account	✓		

Solution 48

	Debit	*Credit*	*No entry in this account*
Materials control account		✓	
Work in progress account			✓
Production overhead control account	✓		

Solution 49

The selling price per unit of product H that will achieve the specified return on investment is £56.05

Workings:
Required return from capital invested to support product H = £290,000 × 14%
= £40,600
Required return per unit of product H sold = £40,600/4,000 = £10.15
Required selling price = 45.90 full cost + £10.15 = £56.05

Solution 50

Within the relevant range, as the number of cups of coffee sold increases:

(a) the ingredients cost per cup sold will stay the same.
(b) the staff cost per cup sold will decrease.
(c) the rent cost per cup sold will decrease.