# MARK SCHEME for the March 2016 series

## 9706 ACCOUNTING

| 9706/32 | Paper 3 (A Level Structured Questions), maximum raw mark 150 |

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners’ meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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1 (a)  

**Kelang Limited**

**Manufacturing account for year ended 31 December 2015**

\[ \begin{array}{lrr}
\hline
\text{Item} & \text{Amount} & \text{Note} \\
\hline
\text{Direct materials consumed} & & \\
\quad \text{Inventory at 1 January 2015} & 24,600 & \\
\quad \text{Purchases} & 287,000 & \\
\quad \text{Carriage inwards} & 3,700 & (1) \\
\quad \text{Inventory at 31 December 2015} & (28,800) & \\
\text{Direct wages} & 344,000 & \\
\text{Prime cost} & 630,500 & (1) \\
\text{Factory overhead} & & \\
\quad \text{Indirect materials} & 43,000 & (1) \\
\quad \text{Indirect wages} & 69,000 & (1) \\
\quad \text{Depreciation on property} & 14,000 & (1) \\
\quad \text{Depreciation on plant and machinery} & 24,000 & (1) \\
\quad \text{Water and electricity expenses} & 12,400 & (1) \\
\quad \text{Other factory overheads} & 32,500 & (1) \\
\quad & 194,900 & \\
\text{Work in progress at 1 January 2015} & 66,800 & (1) \\
\text{Work in progress at 31 December 2015} & (5,400) & (1) \\
\text{Cost of goods manufactured} & 820,000 & \\
\text{Factory profit} & 164,000 & (1) \\
\text{Transferred to the Trading section of the Income Statement} & 984,000 & (1) \\
\hline
\end{array} \]

(b)  

**Kelang Limited**

**Income statement for the year ended 31 December 2015**

\[ \begin{array}{lrr}
\hline
\text{Revenue} & 1,562,000 & \\
\text{Cost of sales} & & \\
\quad \text{Finished goods at 1 January 2015} & 162,000 & \\
\quad \text{Transferred from Manufacturing account} & 984,000 & (1) \\
\quad \text{Finished goods at 31 December 2015} & 186,000 & 960,000 \\
\quad \text{Gross profit} & 602,000 & (1) \\
\quad \text{Administrative expenses} & 374,000 & \\
\quad \text{Depreciation on property} & 6,000 & \\
\quad \text{Depreciation on office equipment} & 18,000 & (1) \\
\quad \text{Water and electricity} & 3,100 & (1) \\
\quad & 401,100 & \\
\quad & 200,900 & \\
\quad \text{Factory profit} & 164,000 & (1) \\
\quad \text{Less: Increase in provision for unrealised profit} & 4,000 & (1) \\
\quad \text{Profit from operations} & 360,900 & (1) \\
\hline
\end{array} \]

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Workings

1. Depreciation on property $400 000 \times 5\% = $20 000
   - Allocated to production $20 000 \times 70\% = $14 000
   - Allocated to administration $20 000 \times 30\% = 6000

2. Depreciation on manufacturing plant and machinery
   ($350 000 – $230 000) \times 20\% = $24 000

3. Depreciation on office equipment $120 000 \times 15\% = $18 000

4. Year end unrealised profit $186 000 \times \frac{1}{(5 + 1)} = 31 000

5. Water and electricity $14 000 + 1500 = $15 500
   - Allocated to production $15 500 \times 80\% = $12 400
   - Allocated to administration $15 500 \times 20\% = $3100

(c) Responses could include:

- transfer price includes unrealised profit
- transfer price less unrealised profit represents the cost of finished goods
- prudence concept
- inventory valued at the lower of cost and net realisable value IAS 2

(1 mark) \times three valid points

(d) Responses could include:

Arguments for ‘should not continue’
- not acceptable for external reporting
- the % of mark-up is subjective

Arguments for ‘should continue’
- production department continues to be treated as profit centre
- facilitates pricing
- cost of production department is better controlled
- compare efficiency, reward efficient managers
- facilitates a system of responsibility accounting

Max 2 \times 3 marks (1 mark for stating and 2 for development) for justification
(max 3 for arguments for should continue
max 3 for arguments for should not continue)
1 mark for recommendation

[Total: 25]
2 (a) (i) 1250 ÷ 50 = $25 (1) [1]

(ii) (3050 × 1000/100) (1) – 25 000 (1) – 4000 (1) = $1500 (1 of) [4]

(b) (i) Consignment account

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods on consignment</td>
<td>25 000 (1)</td>
<td></td>
</tr>
<tr>
<td>Bank (freight)</td>
<td>4 000 (1)</td>
<td>Balance c/d</td>
</tr>
<tr>
<td>Sumit (import duties)</td>
<td>1 500 (1 of)</td>
<td></td>
</tr>
<tr>
<td>Sumit (commission)</td>
<td>10 800 (1 of)</td>
<td></td>
</tr>
<tr>
<td>Consignment profit</td>
<td>15 750 (1 of)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>57 050</td>
<td>57 050</td>
</tr>
<tr>
<td>Balance b/d</td>
<td>3 050 (1 of)</td>
<td></td>
</tr>
</tbody>
</table>

(ii) Sumit account

<table>
<thead>
<tr>
<th></th>
<th>$</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consignment a/c (sales)</td>
<td>54 000 (1)</td>
<td></td>
</tr>
<tr>
<td>Consignment a/c (import duties)</td>
<td>1 500 (1 of)</td>
<td></td>
</tr>
<tr>
<td>Consignment a/c (commission)</td>
<td>10 800 (1 of)</td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td>26 800 (1)</td>
<td>Balance c/d</td>
</tr>
<tr>
<td></td>
<td>14 900 (1 of)</td>
<td>54 000</td>
</tr>
<tr>
<td>Balance b/d</td>
<td>14 900 (1 of)</td>
<td></td>
</tr>
</tbody>
</table>

(c) Chin should make this change (1) of decision

This would reduce costs (1) and hence increase profit on consignment (1) by 11 (1) × $160 = $1760 (1 of)

Increased risk (1) Demand may fall (1) resulting in unsold inventory (1)

Finance may be required to buy all the inventory in one go (1) Borrowing may increase during the year (1) There may be an opportunity cost of surplus funds (1)

On average radios would stay in inventory much longer (1) with risk of obsolescence (1) or theft/damage (1)

Sumit might not be able to organise adequate storage space (1) with inventory holding costs and might require a higher rate of commission to cope with the added responsibility (1)

1 mark for decision
Max 2 for calculation
Max 3 for discussion [6]

[Total: 25]
3 (a) Equity and liabilities section of the Statement of financial position at 31 December 2015

$0.50 ordinary shares 300 000 (1)
5% $0.25 Non-redeemable preference shares 25 000
Share premium 150 000 (1)
Retained earnings (3 000) (1)
Total equity 472 000

Non-current liabilities 100 000 (1)
Current liabilities 10 000 (1)
Total equity and liabilities 582 000

(b) (i) dividend cover
(144 000 – 2000) = 142 000 / 54 000 (1) = 2.63 times (1)

(ii) gearing ratio
125 000(1) / 572 000 × 100 = 21.85% (1) of

(iii) return on capital employed
192 000 / 572 000(1) of × 100 = 33.57% (1) of

(c) Johnson plc has a higher dividend cover (1), a lower ordinary dividend per share (1) of $0.09 (1) and a lower earnings per share (1) of $0.24 (1) but a lower gearing ratio (1) a higher return on capital employed (1)
This means that Johnson plc is not borrowing as much from external sources proportional to the amount of capital employed compared to Samuel plc (1). Samuel has more risk. (1)
The capital the company is being used more efficiently as there is a greater return (1)
However the ordinary dividends could only be paid out of profits 2.63 times compared to 2.1 times for Samuel plc. (1). Max 9

(d) The amount of dividend on ordinary shares is variable with the level of profits therefore for short term return Samuel plc may be better as the dividend return is much better (1) as is the earnings per share (1) Better in short term (1)
However Johnson plc has borrowed less from external sources (1) and is using its capital employed to achieve a greater return. (1) so may be better for long term growth (1)

Recommendation either Samuel or Johnson (1)
Max 4 marks for justification
1 mark for recommendation

[Total: 25]
(a)

Fernando and Gurdip – Statement of Financial Position at 1 July 2015

$ $ 

Assets
Non-current assets 308 000 (1)

Current assets
Inventories 46 893 (1)
Trade receivables 61 110 (1)
Cash and cash equivalents 4 100 112 103
Total assets 420 103

Capital and liabilities
Capital – Fernando 96 750
– Gurdip 281 853 378 603 (7)

Current liabilities
Trade payables 41 500 (1)
Total capital and liabilities 420 103

Workings

<table>
<thead>
<tr>
<th></th>
<th>Fernando</th>
<th>Gurdip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance b/d</td>
<td>94 450</td>
<td>259 000 (1) both</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>6 000</td>
<td>22 000 (1) both</td>
</tr>
<tr>
<td>Inventories</td>
<td>(650)</td>
<td>(307) (1) both</td>
</tr>
<tr>
<td>Provision</td>
<td>(1 050)</td>
<td>(840) (1) both</td>
</tr>
<tr>
<td>Goodwill</td>
<td>7 000</td>
<td>20 000 (1) both</td>
</tr>
<tr>
<td>Goodwill written off</td>
<td>(9 000)</td>
<td>(18 000) (1) both</td>
</tr>
</tbody>
</table>

96 750 281 853 (1) of both [11]

(b)

$ $ 

Budgeted profit for the year 80 000
Add:
Interest on drawings – Fernando 1 620
– Gurdip 1 200 2 820 (1) both 82 820

Deduct:
Salary – Fernando 30 000
– Gurdip 20 000 50 000 (1)

Interest on capital – Fernando 3 870
– Gurdip 11 274 15 144 (1) of (65 144) 17 676

Profit after appropriations – Fernando 5 892
– Gurdip G 11 784 (1) of both (correct ratio) 17 676 [4]

(c) The legal formation of a corporate entity separate from the partners (1). [1]
(d) Advice. (1)

Benefits – limited liability (1), easier to change ownership through shares (1), easier to raise capital (1), shareholders can be paid in dividends (1) and some customers / suppliers prefer dealing with companies rather than partnerships (1).

Limitations – stricter rules (1), more paperwork (1) and higher accountancy costs (1).

Divorce of ownership and control (1).

Max 2 benefits + 2 limitations

1 mark for stating + 1 mark for development of each benefit and limitation.

1 mark for advice [9]

[Total: 25]

5 (a) (i)

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$80 000</td>
<td>$240 000</td>
</tr>
<tr>
<td>Direct labour</td>
<td>$150 000</td>
<td>$300 000</td>
</tr>
<tr>
<td>Production overheads*</td>
<td>$90 000</td>
<td>$450 000</td>
</tr>
<tr>
<td>Total production costs</td>
<td>$320 000 (1)</td>
<td>$990 000 (1)</td>
</tr>
</tbody>
</table>

*$540 000 × 5000 / (5000 + 25 000) = $90 000 $540 000 × 25 000 / (5000 + 25 000) = $450 000

(ii) Unit cost

$320 (1of) $198 (1of) [4]

(b)

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit production cost</td>
<td>$320 (of)</td>
<td>$198 (of)</td>
</tr>
<tr>
<td>Mark-up 50%</td>
<td>$160</td>
<td>$99</td>
</tr>
<tr>
<td>Unit selling price</td>
<td>$480 (1of)</td>
<td>$297 (1of)</td>
</tr>
</tbody>
</table>

[2]

(c) Responses could include:

more accurate cost information to management for decision making, i.e. pricing can monitor the efficiency of various activities allocation of overhead is more fair because it is based on the activities consumed, not on an arbitrary allocation (i.e. labour hours) can also allocate non-manufacturing overhead, i.e. administrative support.

Accept any reasonable alternative

(1 mark) × 1 benefit [1]
(d) 

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine set-up</td>
<td>$66 000</td>
<td>$44 000</td>
</tr>
<tr>
<td>Machine maintenance</td>
<td>$81 000</td>
<td>$99 000</td>
</tr>
<tr>
<td>Materials handling</td>
<td>$60 000</td>
<td>$30 000</td>
</tr>
<tr>
<td>Product inspection</td>
<td>$100 000</td>
<td>$60 000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>307 000</strong></td>
<td><strong>233 000</strong></td>
</tr>
</tbody>
</table>

[4 marks]

(e) 

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials</td>
<td>$80 000</td>
<td>$240 000</td>
</tr>
<tr>
<td>Direct labour</td>
<td>$150 000</td>
<td>$300 000</td>
</tr>
<tr>
<td>Production overheads</td>
<td>$307 000 (of)</td>
<td>$233 000 (of)</td>
</tr>
<tr>
<td><strong>Total production costs</strong></td>
<td><strong>537 000</strong></td>
<td><strong>773 000</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Alpha</th>
<th>Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit cost</td>
<td>$537.00</td>
<td>$154.60</td>
</tr>
<tr>
<td>Mark-up 50%</td>
<td>$268.50</td>
<td>$77.30</td>
</tr>
<tr>
<td>Unit selling price</td>
<td>$805.50</td>
<td>$231.90</td>
</tr>
</tbody>
</table>

[5 marks]

(f) Responses could include:

- the market price of the products
- the impact on the profit
- the impact on the customers/demand
- the effect on competition

Accept any reasonable alternative

(2 marks) × 3 explanations

[6 marks]

(g) Responses could include:

Should change/should not change (1) recommendation

Jumal Limited set the selling price on cost-plus base, therefore accurate cost information is very important.

Comparing the traditional approach with activity based costing approach, if traditional approach is adopted, Alpha is under-costed (Alpha consumes a higher level of resources) while Beta is over-costed (Beta consumes a lower level of resources). This is the consequence of subsidisation.

The problem of product under costing and over costing gives rise to a wrong selling price setting.

Accept any reasonable alternative

(2 marks) × explanation

1 mark for recommendation

[3 marks]

[Total: 25]
6 (a) $\\n\\nSales \quad 2 072 000 \quad (1) \quad $1 184 000 \times 175% \\
Direct materials \quad 288 000 \quad (1) \quad 8000 \text{ units} \times 3 \text{kilos} \times $12 \\
Direct labour \quad 640 000 \quad (1) \quad 8000 \text{ units} \times 4 \text{ hours} \times $20 \\
Fixed overhead \quad 256 000 \quad (1) \quad 8000 \text{ units} \times 4 \text{ hours} \times $8 \\
Manufacturing costs \quad 1 184 000 \\
Gross profit \quad 888 000 \quad (1) \text{of} \\
\\n(b) Responses could include:

Flexible budget facilitates variance analysis
Comparison with the actual result is more meaningful if the budget is at the same activity
level of the actual result.
What the budget will be if the actual output is known? In contrast with static budget which is
prepared at the beginning of the budget period, flexible budget is prepared at the end of the
budget period. This facilitates comparing the actual result for control purpose.
More realistic.

Accept any reasonable alternative

(1 mark) \times 2 \text{ reasons} \\
\\n(c) (i) Direct materials price
($12 \times 22 850 \text{ kg}) \quad -$269 000 = $5200 (1) (F) (1)

(ii) Direct materials usage
(7500 \times 3 \text{ kg} \quad - \quad 22 850 \text{ kg}) \times $12 = $4200 (1) (A) (1)

(iii) Fixed overhead expenditure
$256 000 \quad - \quad $250 000 = $600 091 (F) (1)

(iv) Fixed overhead volume
(8000 \text{ units} \quad - \quad 7500 \text{ units}) \times 4 \text{ hours} \times $8 = $16 000 (1)(A) (1) \\

(d) (i) Adverse direct labour rate variance
- wage rate increases
- trade union activity
- inflation
- use of more skilled labour
- increase in overtime
- poor labour supply increasing the rate per hour/increase in minimum wage per hour.

Adverse direct labour efficiency variance
- workers not well trained
- workers with low skill
- poor working condition
- poor staff morale
- inefficient machine

Accept any reasonable alternative
(1 mark) \times 6 \text{ points across labour variances} \quad [6]

(ii) Adverse fixed overhead volume variance
- actual production less than the budgeted production
- favourable fixed overhead expenditure variance
- actual fixed overhead expenditure is lower than the budget

Accept any reasonable alternative
(1 mark) \times 2 \text{ points} \quad [2]

(e) Response could include:
- better training
- better working condition
- motivate workers with the use of bonus schemes
- better machine
- better working condition
- better quality materials

Accept any reasonable alternative
(2 marks) \times \text{ explanation} \quad [2]

[Total: 25]