## edexcel

Mark Scheme (Results)
June 2014

## International A Level Accounting

WACO2

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.


## Q1a Mark Scheme

Statement of Comprehensive Income for Wavelength Asia plc for Y/e 31st March 2014

| Revenue | 8653000 | $\checkmark$ |
| :---: | :---: | :---: |
| Cost of sales | 5102000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Gross profit | 3551000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Distribution costs | 1426000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Administrative expenses | 555000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Financial cost | 174000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Profit on ordinary activities before tax | 1396000 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Corporation tax | 399000 | $\checkmark$ |
| Profit on ordinary activities after tax | 997000 | Vo/f |

```
ASSETS
Non-current assets
\begin{tabular}{lrll} 
Property, Plant \& Equipment & & & \\
\(\quad\) Land & 3100000 & \(\sqrt{ }\) & \\
\(\quad\) Buildings & 2632000 & \(\sqrt{ }\) & \\
\(\quad\) Motor vans & 45000 & \(\sqrt{ }\) & \\
& & 5777000 & \\
Goodwill & & 800000 & \(\sqrt{ }\) \\
& & & 6577000 \\
Current Assets & & 389000 & \(\sqrt{ }\) \\
Inventories & & & \\
Trade and Other Receivables & 556000 & \(\sqrt{ }\) & \\
\(\quad\) Trade receivables & 250000 & \(\sqrt{ }\) & \\
\(\quad\) Prepayments & & 806000
\end{tabular}
\begin{tabular}{lrll} 
Cash and Cash Equivalents & & & \\
Bank & 125000 & \(\sqrt{ }\) & \\
Cash & 27000 & \(\sqrt{ }\) & \\
& & 152000 & \\
& & & 1347000
\end{tabular}
EQUITY AND LIABILITIES
```


## Equity

```
Share Capital
Ordinary shares of \(£ 1\)
Retained Earnings
2258000 V
\(2118000 \sqrt{ }\) o/f 4376000
Non-Current Liabilities
Long Term Borrowings
Debenture 7.5\% 2016
2000000 V
2000000
```


## Current Liabilities

```
Trade and other Payables Trade Payables
Loan Interest
```

4000 V
649000

```
```

6 4 5 0 0 0 ~ \sqrt { }

```
6 4 5 0 0 0 ~ \sqrt { }
Short Term Borrowings Bank loan
500000
Current Tax Payable
Corporation Tax Payable
399000 V
1548000
7924000 Vo/f
Total \(17 \times \sqrt{ }\)
```


## 1b Mark scheme

## Strengths

Gross Profit is good $\sqrt{ }$ at $41 \%$ of sales. $\sqrt{ }$ (own figure applies)
Net Profit before tax is good $\sqrt{ }$ at $16 \%$ of sales. $\sqrt{ }$ (own figure applies)
Profit for this year added to retained earnings is $£ 1$ million, $\sqrt{ }$ nearly as much as all previous retained earnings. . $\sqrt{ }$ (own figure applies)
Gearing is good.$\sqrt{ }$ at $31.4 \%$. $\sqrt{ }$ (own figure applies)
ROCE $=25 \% \sqrt{ }$ which is very good $\sqrt{ }$ (own figure applies)

## Weaknesses

Current ratio is poor at $0.87: 1 \sqrt{ }$ (own figure applies)
Acid ratio is poor $\sqrt{ }$ at $0.62: 1 \sqrt{ }$ (own figure applies)
Working capital is negative/poor $\sqrt{ }$ at $£(201000) \sqrt{ }$ (own figure applies)
Company has taken out a short term loan of $£ 500000 \sqrt{ }$ perhaps due to liquidity problems. $\sqrt{ }$
Company has tax bill of $£ 399000$ to pay in 30 days, $\sqrt{ }$ but only $£ 125000$ in the bank $\sqrt{ }$
Maximum of 8 marks for arguing only one side.
Conclusion - 2 marks
Should relate to points made above.
Eg Wavelength Asia plc has had a good trading year $\sqrt{ }$ but has liquidity problems $\sqrt{ }$


| Alternative <br> Answer to 2e |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Sales | Qty | Price | $\underline{\text { Revenue }}$ |  |  |
| Dishes | 60 | 37 | 2220 |  |  |
| Vases | 120 | 32 | 3840 | $\sqrt{ }$ o/f any two |  |
| Bowls | 70 | 45 | 3150 |  |  |
| Ornaments | 75 | 41 | 3075 | $\sqrt{ }$ o/f any two |  |
|  |  |  |  | 12285 |  |
| Var Costs |  |  |  |  |  |
| Dishes | 60 | 25 | 1500 |  |  |
| Vases | 120 | 23 | 2760 | $\sqrt{ }$ o/f any two |  |
| Bowls | 70 | 35 | 2450 |  |  |
| Ornaments | 75 | 30 | 2250 | $\sqrt{ }$ o/f any two |  |
|  |  |  |  | $\underline{8960}$ |  |
|  |  |  |  | 3325 | $\sqrt{ }$ o/f |
|  |  | Fixed | Costs | $\underline{1950}$ | $\sqrt{ }$ |
|  |  |  | Profit | 1375 | $\sqrt{\text { o/f } \sqrt{ } \mathrm{C}}$ |
|  |  |  |  |  |  |

## 2(f) Mark Scheme

## For Accepting Offer

Grecian could buy for $£ 35$ and sell for $£ 41$ so making a profit / positive contribution $\sqrt{ }$ of $£ 6$ per item. $\sqrt{ }$ This may realise a total profit of $£ 300 \checkmark$ if all are sold. $\sqrt{ }$
May allow Grecian to meet ALL orders promptly $\sqrt{ }$ which keeps customers happy. $\sqrt{ }$
Demand may increase still further, $\sqrt{ }$ and Grecian can meet this increase. $\sqrt{ }$
Avoid possible production problems $\sqrt{ }$

## Against Accepting Offer.

Marginal costing theory $\sqrt{ }$ would say do not accept buying for $£ 35$ when business can make for $£ 30 \checkmark$ as this would be $£ 5$ more expensive. $\sqrt{ }$
Grecian are only 15 items short on meeting an order, $\sqrt{ }$ so do not need 50 items, $\sqrt{ }$ as this gives an extra 35 items. $\sqrt{ }$
There may not be any demand for the extra 35 items. $\downarrow$
There may not be any storage space for the extra 35 items. $\downarrow$
The increase in demand for week 16 may be temporary $\sqrt{ }$ so more than 35 items may be left unsold. $\sqrt{ }$ Possible quality issues $\checkmark$
Hellenic are interested in a regular/long term contract which may be problematic $\sqrt{ }$
Maximum of 8 marks available for giving one side of the argument.
Conclusion
Grecian Glass should / should not accept contract.

## Q3 Mark Scheme

(a)

Figures are in $£$ millions

|  | Ordinary <br> Share £1 <br> Capital | Share Premium | Capital Redemption Reserve | Retained Earnings | General Reserve | Foreign Exchange Reserve | Total Equity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at 1 April 2013 | 1100 | 300 | 50 | 623 | 85 | 20 | 2178 |
| (i)Comprehensive Income for the Year |  |  |  | 348 V |  |  | 348 |
| (ii) Transfer |  |  |  | (35) V | 35 V |  | -- |
| (iii) Transfer |  |  |  | 20 V |  | (20) $\sqrt{ }$ | -- |
| (iv) Final dividend |  |  |  | (30.8) $\sqrt{ } \mathrm{V}$ |  |  | $\begin{aligned} & (30.8) \\ & \sqrt{\text { both }} \end{aligned}$ |
| (v) Redemption of Shares | (80) V | (24) V | $104 \sqrt{ } \sqrt{ }$ | (104) $\sqrt{ } \sqrt{ }$ |  |  | (104) |
| (vi) Interim dividend |  |  |  | (7.14) $\sqrt{ } \sqrt{ }$ |  |  | $\begin{aligned} & \text { (7.14) } \\ & \sqrt{\text { both }} \end{aligned}$ |
| Balance at 31 <br> March 2014 | 1020 o/f | $\begin{gathered} 276 \\ \sqrt{\text { both }} \\ \text { o/f } \end{gathered}$ | 154 o/f | $\begin{gathered} 814.06 \\ V_{\mathrm{V} / \mathrm{f}} \end{gathered}$ | $\begin{gathered} 120 \\ \sqrt{\text { both }} \\ \text { o/f } \end{gathered}$ | -- | $\begin{aligned} & 2384.06 \\ & \sqrt{0}^{2} / \mathrm{f} \sqrt{\mathrm{C}} \end{aligned}$ |

There are four occasions where the word 'both' is used in the mark scheme for Q3a. The couplings are:

- Balance of share premium 276 goes with balance of ordinary share capital 1,020 ;
- Balance of general reserve 120 goes with balance of capital redemption reserve 154;
- Final dividend (30.8) in total equity column goes with comprehensive income 348 in total equity column; and
- Interim dividend (7.14) in total equity column goes with redemption of shares (104) in total equity column.
(b)

Advantages of redeeming shares:
Company may have excess/large amounts of cash, $\sqrt{ }$ which they feel would be best used / no better use than redeeming shares. $\sqrt{ }$
Less funds will have to be paid out in the future $\sqrt{ }$ in terms of dividends. $\sqrt{ }$
Certain ratios will improve, $\sqrt{ }$ eg Return on Capital Employed, Earnings per share. $\sqrt{ }$ (need one)
This will make managers and directors and company look better. $\sqrt{ }$
The share price will rise $\sqrt{ }$ as less shares are on the market. $\sqrt{ }$
Disadvantages of redeeming shares:
Drain on company's liquid resources. $\sqrt{ }$ ie cash and cash equivalents. $\sqrt{ }$
Liquidity ratios will worsen. $\sqrt{ }$ eg Current ratio, and Acid ratio $\sqrt{ }$
Gearing ratio will worsen. $\sqrt{ }$ as Debts is a larger percentage of capital employed. $\sqrt{ }$
The company's Statement of Financial Position has a smaller equity base $\sqrt{ }$ which gives the impression of a smaller company $\sqrt{ }$

Maximum of 2 marks for each advantage and disadvantage.

## (c)

## Reserves

Revenue reserves $\sqrt{ }$ are appropriation of retained profit ie created after net profit has been calculated. $\sqrt{ }$ Eg General reserve $\sqrt{ }$
Capital reserves $\sqrt{ }$ may arise for a specific reason. $\sqrt{ }$ Eg issuing shares at a premium, $\sqrt{ }$ or revaluing a non-current asset, $\sqrt{ }$ or redeeming own shares without an issue of new shares. $\sqrt{ }$ (max 2 examples).

## Provisions

Provisions are amounts set aside before arriving at net profit $\sqrt{ }$ eg for depreciation. $\sqrt{ }$ Provisions reduce the value of assets. $\sqrt{ }$ The reason for the provision will be specific $\sqrt{ }$ eg for damages in a court case, $\sqrt{ }$ but the amount of the provision would be an estimate. $\sqrt{ }$
Provisions follow the concept of prudence $\sqrt{ }$
Provisions enable a true and fair view to be shown/using matching concepts $\sqrt{ }$

## Liabilities

Liabilities are debts that have been incurred by the business $\sqrt{ }$ and must be paid. $\sqrt{ }$
Short term (current) liabilities must be paid back within one year. $\sqrt{ }$ Eg trade payables to suppliers. $\sqrt{ }$
Long term liabilities are to be repaid in a term greater than one year. $\sqrt{ }$ Eg long term bank loan. $\sqrt{ }$
Maximum of 4 marks for each term, maximum of 10 for the section.
(d)

Dividend payment is generous
$3.5 \%$ return on nominal value of share $£ 1 \sqrt{ }$ may be higher than interest rate in a bank. $\sqrt{ }$ May be higher than other companies. $\sqrt{ }$
May be a good return for this industry. $\sqrt{ }$
Dividend payment is not generous
3.5 p may be a lower return than what could have been gained on a debenture $\sqrt{ }$ or bond. $\sqrt{ }$

Other factors (could appear on either side or argument)
Need to know the price paid/market price for the share, $\sqrt{ }$ which will tell us the yield $\sqrt{ }$ ie true return on investment. $\sqrt{ }$
Need to know the state of the world/national economy. $\sqrt{ }$ If a boom year, then 3.5 p is low. $\sqrt{ }$ If a recession, 3.5 p could be regarded as high. $\sqrt{ }$
How does 3.5 p compare to previous year's dividends? $\sqrt{ }$ May be seen as higher or lower. $\sqrt{ }$
Maximum of $8 \sqrt{s}$ for arguing one side.

## Conclusion

3.5p dividend is/is not generous. $\sqrt{ } \sqrt{ }$

| Q4 Mark Scheme |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) |  |  | (b) |  | c |  |  |
|  | BUDGET |  |  | ACTUAL |  | VARIANCE |  |  |
| Sales | 77000 | $\checkmark$ |  | 74250 | $\sqrt{ }$ | 2750 | ADV |  |
| Material | 17600 | $\sqrt{ }$ |  | 15488 | $\checkmark$ | 2112 | FAV | $\checkmark$ off(any two) |
| Labour | 25840 | $\checkmark$ |  | 26220 | $\checkmark$ | 380 | ADV |  |
| Variable Overheads | 10460 | $\checkmark$ |  | 10750 | $\checkmark$ | 290 | ADV | Vo/f(any two) |
| COGS | 53900 | $\checkmark$ |  | 52458 | $\checkmark$ | 1442 | FAV |  |
|  |  |  |  |  |  |  |  |  |
| GrossProfit | 23100 | $\checkmark$ |  | 21792 | $\checkmark \mathrm{l}$ /f | 1308 | ADV | Volf(any two) |
|  |  |  |  |  |  |  |  |  |
| Fixed Overheads | 16940 | $\checkmark$ |  | 15440 | $\sqrt{ }$ o/f | 1500 | FAV |  |
|  |  |  |  |  |  |  |  |  |
| Net profit | 6160 | $\checkmark$ |  | 6352 | $\sqrt{\text { o/f }}$ | 192 | FAV | $\checkmark$ o/f (any two) |
|  |  |  |  |  |  |  |  |  |
|  | Marks |  | 9 |  | 11 |  |  | 4 |
|  |  |  |  |  |  |  |  |  |

(d)

FOR Budgets as a tool for management control
Some costs are under management control $\sqrt{ }$ eg rate paid to direct labour. $\sqrt{ }$
Budgets allow business to see how a level of costs eg direct labour $\sqrt{ }$ impacts on profit. $\sqrt{ }$ This may result in management deciding on an appropriate level of pay rise. $\sqrt{ }$
Variances can be analysed $\sqrt{ }$ and remedial action taken. $\sqrt{ }$
Budgets are good motivators $\sqrt{ }$ especially where staff meet targets/bonus payments etc $\sqrt{ }$ Budgets help coordination within the business $\sqrt{ }$

AGAINST Budgets as a tool for management control
Some costs are out of management control $\sqrt{ }$ eg commodity prices such as sugar. $\sqrt{ }$
Some figures/costs may change, $\sqrt{ }$ so drawing up budgets is a waste of time and money. $\sqrt{ }$
Need to employ a specialist so wage rises $\sqrt{ }$
Maximum of $4 \sqrt{ }$ 's for arguing one side of argument.
Conclusion
Budgets are a useful tool for management control $\sqrt{ } \sqrt{ }$

## Q5 Mark Scheme

(a)
(i) Depreciation is a non cash item, $\sqrt{ }$ which has been deducted from profit. $\sqrt{ }$
(2)
(ii) $(£ 120000-£ 35000) \sqrt{ }=£ 85000 \sqrt{ }$
(iii) $(£ 983000+£ 313000) \sqrt{ }=£ 1296000 \sqrt{ }$
(2)
(iv) The amount owed by customers has decreased, $\sqrt{ }$ so this represents an increase in cash inflow $\downarrow$
(v) $(£ 1084000+£ 274000) \sqrt{ }=£ 1358000 \sqrt{ }$
(vi) First interest payment made after 6 months, of $£ 480000 \sqrt{ }$ Total for year would be $£ 960000 \sqrt{ }$
$\frac{£ 960000}{〔} \downarrow \times 100=8 \% \sqrt{ }$
$£ 12000000 \sqrt{ }$
(vii) If Chang Tao Stores plc fail to pay the interest due, or repay the debenture when due or go into liquidation $\sqrt{ }$, the debenture holders can take over the property. $\sqrt{ }$
(viii) Because it has not been paid yet. $\sqrt{ }$
(ix) $(£ 2106000-£ 209000) \sqrt{ }=£ 1897000 \sqrt{ }$
(x) Year end cash balance $=(£ 1095000+£ 178000) \sqrt{ }=£ 1273000 \sqrt{ }$

$$
\begin{equation*}
\text { Yearly movement }=(£ 1897000-£ 1273000) V=£ 624000 \text { decrease } \sqrt{ } \tag{4}
\end{equation*}
$$

(b)

Liquidity handled well
Positive cash and cash equivalent balances $\sqrt{ }$ at start and end of year. $\sqrt{ }$
Payments to purchase shares in other companies, $\sqrt{ }$ seemed to have been almost entirely financed by issue of shares and debentures $\sqrt{ }$ (long term finance). $\sqrt{ }$
Operations are making a profit and generating funds. $\sqrt{ }$
Low level of dividends $\sqrt{ }$ appear to have been paid, so cash not leaving the company. $\sqrt{ }$

## Liquidity not handled well

Cash and cash equivalents has decreased over the year. $\sqrt{ }$ Fall in cash is worrying $\sqrt{ }$, especially as company has stores, which should be taking in cash.
Issue of shares and debentures $\sqrt{ }$ not quite enough to finance purchase shares in other companies. $\sqrt{ }$ All of Net cash from Operating activities may have been used buying non-current assets $\sqrt{ }$

Maximum of 4 marks for arguing one side.
Conclusion
Liquidity has been handled well/badly $\sqrt{ } \sqrt{ }$

## Q6 Mark Scheme

(a) (i)

| Statement of comprehensive Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Sales | 250 |  | 1400 | 350000 |  |
| Less |  |  |  |  |  |
| Material Costs | 78 |  | 1400 | 109200 | $\sqrt{\text { any two }}$ |
| Direct Labour | 95 |  | 1400 | 133000 |  |
| Rent | 3375 |  | 16 | 54000 | $\sqrt{\text { any two }}$ |
| Other Fixed Costs | 1115 |  | 48 | 53520 |  |
| Insurance | 184 |  | 12 | 2208 | $\sqrt{ }$ any two |
| Total Costs |  |  |  | 351928 |  |
|  |  |  |  |  |  |
|  |  |  |  | -1928 | $\checkmark \mathrm{olf}$ |
| (a) (ii) |  |  |  |  | 4 marks |
| BEP | 109728 | Vo/f | 1425 | $\sqrt{ }$ o/f |  |
|  | 77 | $\checkmark$ |  |  | 4 marks |
| (b) (l) |  |  |  |  |  |
| Statement of comprehensive Income |  |  |  |  |  |
|  |  |  |  |  |  |
| Sales | 250 |  | 1350 | 337500 |  |
| Less |  |  |  |  |  |
| Material Costs | 78 |  | 1350 | 105300 | $\sqrt{\text { any two }}$ |
| Direct Labour | 95 |  | 1350 | 128250 |  |
| Rent | 3375 |  | 12 | 40500 | $\sqrt{\text { any two }}$ |
| Other Fixed Costs | 1115 |  | 36 | 40140 |  |
| Insurance | 170 |  | 12 | 2040 | $\sqrt{\text { any two }}$ |
| Total Costs |  |  |  | 316230 |  |
|  |  |  |  |  |  |
| Profit/(Loss) |  |  |  | 21270 | $\sqrt{0 / f}$ |
| (b) (ii) |  |  |  |  | 4 marks |
|  |  |  |  |  |  |
| BEP | 82680 | Vo/f | 1074 | $\sqrt{ }$ o/f |  |
|  | 77 | $\checkmark$ |  |  | 4 marks |
| (b) (iii) |  |  |  |  |  |
| Margin of Safety | 1350 |  | -1074 | V olf 276 | $\checkmark$ olf |
|  |  |  |  |  | 2 marks |



## 6d Mark scheme

FOR Closing store
Loss turns into a profit, $\sqrt{ }$ an improvement of $£ 23198 \sqrt{ }$ on the bottom line.
Break even point is lower $\sqrt{ }$ by 351 units. $\sqrt{ }$
Business may be leaner/lower fixed cost base $\sqrt{ }$ which helps when trading is difficult. $\sqrt{ }$ Margin of safety is now 276 units whereas before breakeven point was not reached $\sqrt{ }$

AGAINST Closing Store
Sales in units have fallen $\sqrt{ }$ by 50 units. $\sqrt{ }$
Business has less store outlets $\sqrt{ }$ to take advantage of upturn in trading conditions. $\sqrt{ }$
Possible redundancy costs $\sqrt{ }$
Figures are only predictions $\sqrt{ }$
Maximum of $4 \sqrt{ }$ 's for arguing one side.
Conclusion
Store should close $\sqrt{ } \sqrt{ }$

## Q7a Mark scheme

(i) the payback period is the length of time taken to recover $\sqrt{ }$ the initial cost of an investment $\sqrt{ }$
(ii) the accounting (average) rate of return is the profit as a percentage of the cost of the investment $\sqrt{ }$ over the life of the investment $\sqrt{ }$
(iii) the internal rate of return shows the true return of the investment $\sqrt{ }$ expressed as a percentage $\sqrt{ }$ OR
the cost of capital $\sqrt{ }$ when the net present value is equal to zero $\sqrt{ }$

| (b) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Net cash |  | Discount | Discounted |  |
| Amillakat | Inflow |  | Outfow |  | flow |  | Factor | Cash Flow |  |
| Year 0 |  |  | 22 |  | -22 |  | 1 | (22.0000) | $\checkmark$ |
| Year 1 | 11.3 | $\checkmark$ | 4.2 | $\checkmark$ V | 7.1 | $\checkmark \mathrm{o} / \mathrm{f}$ | 0.935 | 6.6385 |  |
| Year 2 | 11.3 |  | 4.2 |  | 7.1 |  | 0.873 | 6.1983 | $\checkmark \mathrm{olf} \mathrm{(2)}$ |
| Year 3 | 11.3 |  | 4.2 |  | 7.1 |  | 0.816 | 5.7936 |  |
| Year 4 | 11.3 |  | 4.2 |  | 7.1 |  | 0.763 | 5.4173 | $V$ olf (2) |
| Year 5 | 11.3 |  | 4.2 |  | 7.1 |  | 0.713 | 5.0623 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Total |  |  |  |  |  |  |  | 7.1100 | $\checkmark \mathrm{o} / \mathrm{f}$ |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Net cash |  | Discount | Discounted |  |
| Barigong | Inflow |  | Outflow |  | flow |  | Factor | Cash Flow |  |
| Year 0 |  |  | 16 |  | -16 |  | 1 | (160000) | $\checkmark$ |
| Year 1 | 11.3 |  | 5.8 | $\sqrt{ }$ V | 5.5 | $\checkmark \mathrm{l}$ /f | 0.935 | 5.1425 |  |
| Year 2 | 11.3 |  | 5.8 |  | 5.5 |  | 0.873 | 4.8015 | $V \mathrm{olf} \mathrm{(2)}$ |
| Year 3 | 11.3 |  | 5.8 |  | 5.5 |  | 0.816 | 4.4880 |  |
| Year 4 | 11.3 |  | 5.8 |  | 5.5 |  | 0.763 | 4.1965 | $\checkmark \mathrm{olf}$ (2) |
| Year 5 | 11.3 |  | 5.8 |  | 5.5 |  | 0.713 | 3.9215 | $\checkmark \mathrm{o} / \mathrm{f}$ |
| Total |  |  |  |  |  |  |  | 6.5500 | $\checkmark$ o/f |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 18 marks |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

## Q7c Mark scheme

For Amillakat

| Profitability <br> Index |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| Amillakat | $\underline{7.11}$ | $\sqrt{ } \mathrm{o} / \mathrm{f} \mathrm{x}$ | 100 |  | 32.32 | $\sqrt{ } \mathrm{o} / \mathrm{f}$ |
|  | 22 | $\sqrt{ }$ |  |  |  |  |

Has largest NPV $\sqrt{ }$ by $£ 0.56$ million. $\sqrt{ }$
Location of Barigong in city centre $\sqrt{ }$ but Amillakat more environmentally friendly. $\sqrt{ }$
Does company have to follow any obligations due to grant at Barigong? $\sqrt{ }$

## For Barigong

| Profitability <br> Index |  |  |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| Barigong | $\underline{6.55}$ | $\sqrt{ } \mathrm{o} / \mathrm{f} \times$ | 100 |  | 40.94 | $\sqrt{ } \mathrm{o} / \mathrm{f}$ |
|  | 16 | $\sqrt{ }$ |  |  |  |  |

Has greater Profitability Index $\sqrt{ }$ by $8.62 \sqrt{ }$
Grant is available so cost reduced. $\downarrow$
Other points
Figures are only predictions $\sqrt{ }$
Other investment appraisal methods should be applied eg payback period $\sqrt{ }$
What happens after five years? $\sqrt{ }$
Maximum of arguing one side only $4 \sqrt{ }$

## Conclusion ( $2 \sqrt{ } \sqrt{ }$ 's)

P.I. index states should choose Barigong $\sqrt{ } \sqrt{ }$ OR

Other factors may favour Amillakat $\sqrt{ } \sqrt{ }$

## 8 marks

Total 32 marks

