## edexcel 쁯

Mark Scheme (Results)
January 2014

International Advanced Level Accounting (WAC02/01)

## Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere
Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2014
Publications Code IA037543
All the material in this publication is copyright
© Pearson Education Ltd 2014

- 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.
> Question 1
- part (a)

| Inflow s |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | 13500 | 52 | 0.73 | 512460 | $\checkmark$ |  |
| Year 2 | 14000 | 52 | 0.75 | 546000 | $\checkmark$ |  |
| Year 3 | 14000 | 52 | 0.75 | 546000 |  |  |
| Year 4 | 14500 | 52 | 0.77 | 580580 | $\checkmark$ |  |
| Outflows |  |  |  |  |  |  |
| Year 1 | 8500 | 52 | 164000 | 278000 | $\checkmark$ |  |
| Year 2 | 8500 | 52 | 164000 | 278000 | $\checkmark$ |  |
| Year 3 | 8800 | 52 | 164000 | 293600 | $\checkmark$ |  |
| Year 4 | 8800 | 52 | 164000 | 293600 | $\checkmark$ |  |
| Net Present Value |  |  | Net | Discount | Discounted |  |
|  | Inflow | Outflow | Cash flow | Factor | Net CF |  |
| Year 0 |  |  |  | 9\% | -700000.00 | $\checkmark$ |
| Year 1 | 512460 | 278000 | 234460 | Vo/f 0.917 | 214999.82 | Vo/f |
| Year 2 | 546000 | 278000 | 268000 | Vo/f 0.842 | 225656.00 | Vo/f |
| Year 3 | 546000 | 293600 | 252400 | Vo/f 0.772 | 194852.80 | $\sqrt{ } \mathrm{o} / \mathrm{f}$ |
| Year 4 | 580580 | 293600 | 286980 | Vo/f 0.708 | 203181.84 | Vo/f |
|  |  |  |  |  | 138690.46 | Vo/f $\sqrt{ } \mathrm{C}$ |

- part (b)

| Payback period | Net |  |  |
| :--- | ---: | ---: | :--- |
|  | Cash flow | Cumulative |  |
| Year 1 | 234460 | 234460 |  |
| Year 2 | 268000 | 502460 | $\sqrt{ }$ o/f |
| Year 3 | 252400 | 754860 | $\sqrt{ }$ o/f |

$$
\begin{array}{rlrl}
\text { Payback period } & =700000-502460 & =197540 \sqrt{ } \mathrm{o} / \mathrm{f} \\
& =2 \text { years }\left(\frac{197540 \mathrm{o} / \mathrm{f}}{252400 \sqrt{ } \mathrm{o} / \mathrm{f}} \mathrm{f}\right) \sqrt{ }=2 \text { years } \sqrt{ } \text { o/f } 9.4 \text { months } \sqrt{ } \sqrt{ } \text { o/f }
\end{array}
$$

- part (c)

Answers may include:
o/f rule applies
For investment
NPV method states invest $\sqrt{ }$ as NPV is positive $\sqrt{ }$
Payback method says invest $\sqrt{ }$ as project does pay back $\sqrt{ }$. Payback period of 2.94 years should be acceptable for the company $\sqrt{ }$

Positive cash flows received each year $\sqrt{ }$
Other Relevant Points - could be For or Against investment.
How accurate are the predictions $\sqrt{ }$ for costs, cost of capital, and revenues? $\sqrt{ }$
Chance of renewal of contract after 4 years? $\sqrt{ }$ Would this be profitable? $\sqrt{ }$
Other possible investment projects available at present? $\sqrt{ }$ More or less profitable? $\sqrt{ }$
Objectives/strategy of company? $\sqrt{ }$ Is this investment in line with objectives? $\sqrt{ }$ Is supermarket ethical? $\sqrt{ }$
Other methods could be considered e.g. Accounting rate of return $\sqrt{ }$
Future prospects of investment $\sqrt{ }$
Sandwich market is very competitive $\sqrt{ }$
Sandwiches/food is a basic essential product $\sqrt{ }$
Maximum for arguing one side only is 8 marks

Overall Conclusion
Company should invest. $\sqrt{ } \sqrt{ }$

## 12 marks

- part (d) (i)

Internal rate of Return $=$
Lower discount rate $\sqrt{ }+$ (\%difference between rates $\sqrt{ } \times$ NPV using lower \%rate) $\sqrt{ }$ Difference between NPVs) $\sqrt{ }$

$$
\begin{aligned}
& =16 \% \sqrt{ }+\left(4 \sqrt{ } \times \frac{21430)}{55669)} \sqrt{ }\right. \\
& =17.54 \% \sqrt{ } \mathrm{o} / \mathrm{f} \sqrt{ } \mathrm{C}
\end{aligned}
$$

10 marks

- part (d) (ii)

IRR at $17.54 \% \mathrm{o} / \mathrm{f}$ is greater $\sqrt{ }$ than the cost of capital at $9 \% \sqrt{ }$ so company should invest in project $\sqrt{ } \sqrt{ }$ o/f

4 marks
Total 52 marks

Question 2
part (a)

| Statement of Cash Flow for y/e 31 December 2013 |  |  |  |
| :---: | :---: | :---: | :---: |
| Cash Flows from operating activities $\sqrt{ }$ |  |  |  |
| Profit from operations (222000 $\sqrt{ }+8750 \sqrt{ }$ ) | 230750 | $\sqrt{ }$ |  |
| Add Depreciation | 137000 | $\sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ } \sqrt{ }$ |  |
| Less Profit on Sale of Fixed Asset | (13000) | $\sqrt{ }$ |  |
| Operating cash flow before working capital changes | 354750 | $\sqrt{ } \mathrm{o} / \mathrm{f}$ |  |
| Increase in inventories | (38000) | $\sqrt{ }$ |  |
| Increase in trade receivables | (7000) | $\sqrt{ }$ | 19 |
| Increase in trade payables | 24000 | $\sqrt{ }$ |  |
| Cash generated from operations | 333750 | $\sqrt{ } \mathrm{o} / \mathrm{f}$ |  |
| Less Interest Paid: Debenture (7\% x $250000 \times 0.5$ ) V | (8750) | $\sqrt{ } \sqrt{ }$ |  |
| Less Tax Paid | (121000) | $\sqrt{ }$ |  |
| Net Cash from Operating Activities | 204000 | Vo/f |  |
| Cash Flow from Investing Activities $\sqrt{ }$ |  |  |  |
| Payments to acquire tangible fixed assets | (455000) | $\sqrt{ }$ |  |
| Proceeds from sale of tangible fixed assets | 54000 | $\sqrt{ }$ |  |
| Net Cash Used in Investing Activities | (401000) | Vo/f | 4 |
| Cash Flow from Financing Activities $\sqrt{ }$ |  |  |  |
| Issue of Ordinary shares (200000 $\sqrt{ }+100000 \sqrt{ }$ ) | 300000 | $\sqrt{ } \sqrt{ }$ |  |
| Issue of debenture | 250000 | $\sqrt{ }$ |  |
| Repayment of bank loan | (175000) | $\sqrt{ }$ |  |
| Dividends Paid : Final 2012 (1000 $000 \times 4 \mathrm{p}$ ) $\sqrt{ }$ | (40000) | $\sqrt{ } \sqrt{ }$ |  |
| Interim 2013 (1200000 $\times 2 \mathrm{p}$ ) $\sqrt{ }$ | (24000) | $\sqrt{ } \sqrt{ }$ |  |
| Preference ( $400000 \times 6 \%$ ) $\sqrt{ }$ | (24000) | $\sqrt{ } \sqrt{ }$ |  |
| Net Cash From in Financing Activities | 287000 | Vo/f | 12 |
| Net increase in cash and cash equivalents $V$ | 90000 | Vo/f $\sqrt{ } \mathrm{C}$ | 3 |
| Cash and cash equivalents at beginning of the year | 404000 | $\checkmark$ |  |
| Cash and cash equivalents at the end of the year | 494000 | $\sqrt{ }$ | 2 |
|  | TOTAL | $\sqrt{ } \times 40$ | 40 Marks |
| Depreciation Calculation |  |  |  |
| Leaving the books with machinery sold$(258000-41000) \sqrt{ }=217000 \sqrt{ }$ |  |  |  |
| Left in the books (530000-217000) $\sqrt{ }=313000 \mathrm{~V}$ |  |  |  |
| $\begin{aligned} & \text { Depreciation for the year }= \\ & (450000-313000) \sqrt{ }=137000 \sqrt{ } \end{aligned}$ |  |  |  |

Part b
Answers may include:

Advantages of debentures
Debenture may have a lower rate of interest $\sqrt{ }$ which would have been fixed on issue $\sqrt{ }$. The bank loan may have a higher rate if there is a period of high or rising interest rates. $\sqrt{ }$
Interest only has to be paid on a debenture every 6 months $\sqrt{ }$, whereas bank loans require monthly repayments $\sqrt{ }$. The debenture therefore allows the company some breathing space $\sqrt{ }$ which is useful if trading is seasonal, or going through a period of low sales. $\sqrt{ }$
Debenture may be for a longer period of time, $\sqrt{ }$ which may benefit company, especially if to finance a long term project. $\sqrt{ }$
Bank may wish to be involved in decision-making etc if loan given $\sqrt{ }$ e.g. ask for a seat on the board $\sqrt{ }$

Could argue either/ both sides (as one $\sqrt{ }$ each) Interest on both is allowable for tax $\sqrt{ } \sqrt{ }$
Both have the same effect on gearing ie worsens $\sqrt{ } \sqrt{ }$
Could argue either/ both sides - max of 2 ticks
Both would require assets $\sqrt{ }$ to be offered as security/collateral. $\sqrt{ }$ Bank loan could be renewed/refinanced $\sqrt{ }$ to be the same length as a debenture $\sqrt{ }$ Neither result in dilution of ownership $\sqrt{ }$ so share price may not fall $\sqrt{ }$

Advantages of bank loans
Interest rate may be lower $\sqrt{ }$
Bank loan is likely to be for shorter period $\sqrt{ }$ so less interest may be paid. $\sqrt{ }$
Monthly repayments may be preferable $\sqrt{ }$ to larger six-monthly repayments. $\sqrt{ }$
Bank may have good relationship with company $\sqrt{ }$ and give advice etc $\sqrt{ }$
Debenture holders may wish to be involved in decision-making/control $\sqrt{ }$ e.g. ask for a seat on the board $\sqrt{ }$

Maximum for arguing one side only, 8 marks

Conclusion
Debentures / bank loans are better $\sqrt{ } \sqrt{ } 2$ marks

Question 3

- part (a)

|  | Debit | Credit |
| :---: | :---: | :---: |
| (i) Statement of Comprehensive Income / Statement of Changes in Equity / Retained Earnings $\sqrt{ }$ | $900000 \sqrt{ }$ |  |
| Ordinary Share Dividend $\sqrt{ }$ |  | 900000 |
|  |  |  |
| Ordinary Share Dividend | 900000 V |  |
| Bank |  | 900000 V |
|  |  |  |
| (ii) General Reserve | 2400000 V |  |
| Retained Earnings |  | 2400000 V |
|  |  |  |
| (iii) Statement of Comprehensive Income | 2000000 V |  |
| Provision for Customer Repayments |  | 2000000 V |
|  |  |  |
| (iv) 4\% Preference Shares | 5000000 V |  |
| Bank |  | 5000000 V |
|  |  |  |
| Retained Earnings / <br> Statement of Comprehensive Income | $5000000 \sqrt{ }$ |  |
| Capital Redemption Reserve |  | 5000000 V |
|  |  |  |
| (v) Property | 1000000 V |  |
| Revaluation Reserve |  | $1000000 \sqrt{ }$ |
|  |  |  |
| (vi) Debenture Interest $\quad \checkmark$ | 175000 V |  |
| Bank $\sqrt{ }$ |  | 175000 |
|  |  |  |

NOTE:
(1) Allow 'Statement of Comprehensive Income' OR 'Statement of Changes in Equity' OR Retained Earnings for (i)
(2) Allow 'Statement of Comprehensive Income' OR 'Retained Earnings’ for (iv)

- part (b)

| Equity |  |
| :--- | :---: |
| Authorised Share Capital |  |
| Ordinary Shares of £1 | 40000000 |
| $4 \% £ 1$ Redeemable Preference Shares | $15000000 \sqrt{ }$ both |
|  |  |
| Issued Share Capital | $30000000 \quad \sqrt{ }$ |
| Ordinary Shares of £1 | 5000000 V |
| $4 \% £ 1$ Redeemable Preference Shares | 7500000 V |
|  | 5000000 V |
| Share Premium reserve | 2000000 V |
| Capital Redemption Reserve | $11922000 \mathrm{~V} \sqrt{ } \sqrt{ } \sqrt{ }$ |
| Revaluation reserve | 600000 V |
|  |  |
| Retained Earnings | $62022000 \sqrt{ } \mathrm{o} / \mathrm{f}$ |
| General Reserve |  |
|  |  |
| Total Equity |  |

Retained earnings calculation $=$
$(12850000+4572000) \sqrt{ }+(2400000-2000000) \sqrt{ }-5000000 \sqrt{ }-900000 \sqrt{ }$ $=11922000$ o/f $\sqrt{ }$

14 marks

- part (c) (i)

Advantages
Redeemable shares can be bought back from shareholders, $\sqrt{ }$ so will mean less funds leave the company in the form of dividends each year $\sqrt{ }$ leaving more funds in the business for operations $\sqrt{ }$ or paying dividends to ordinary shareholders $\sqrt{ }$ (Max 2 ticks for one point)
Buying back debt $\sqrt{ }$ means that the gearing ratio could improve/reduce. $\sqrt{ }$ which reduces risk $\sqrt{ }$
Statement of Financial Position looks stronger $\sqrt{ }$ which could help attract investors $\sqrt{ }$
Capital may not be needed $\sqrt{ }$
Return on Capital employed will rise $\sqrt{ }$
4 marks

- part (c) (ii)

Disadvantages
Buying back the shares $\sqrt{ }$ means a large outflow of funds at this time. $\sqrt{ }$ Administration costs of buying back shares are high $\sqrt{ }$ e.g. staff time, bank fees, postage etc. $\sqrt{ }$
Preference shareholders may be unhappy $\sqrt{ }$ and may not invest in the future $\sqrt{ }$

- part (d)

Evaluation of creating and utilising Capital Redemption Reserve (CRR);
Answers may include:
Case For;
CRR acts as a creditors' buffer $\sqrt{ } \sqrt{ }$
Capital base is maintained $\sqrt{ }$
CRR is a Capital Reserve $\sqrt{ }$ so it prevents directors/shareholders $\sqrt{ }$ from taking cash/ capital out of the business, $\sqrt{ }$ leaving little/nothing for creditors in the event of the company experiencing liquidity/ trading problems. $\sqrt{ }$
Cannot be transferred back to the Statement of Comprehensive Income $\sqrt{ }$ and then used to pay out dividends $\sqrt{ }$
Presence of CRR may help a company obtain credit $\sqrt{ }$ or investment/ buying of company shares $\sqrt{ }$ as Statement of Financial Position appears stronger $\sqrt{ }$
In certain circumstances e.g. redemption of shares, the CRR must be created by company law $\sqrt{ }$ therefore should be of benefit. $\sqrt{ }$
CRR can be used for a bonus issue of shares $\sqrt{ }$
Case Against ;
Creating a CRR takes time and money $\sqrt{ }$ and accounting expertise. $\sqrt{ }$
Reduces flexibility, $\sqrt{ }$ as company may not be able to do what they want to do e.g. redeem shares, $\sqrt{ }$ if e.g. insufficient funds in revenue reserves. $\sqrt{ }$

Maximum for arguing one side only 8 marks

Conclusion
Capital Redemption Reserve is worthwhile/ useful/ effective. $\sqrt{ } \sqrt{ }$
> Question 4

- part (a)
$80+31+42+28+39=£ 220$ million $\sqrt{ }$
Capital Budget
Share capital

$$
\begin{array}{lll}
220 \times 40 \% & = & £ 88 \text { million } \sqrt{ } \\
6 \% \text { Debenture } & = & £ 56 \text { million } \sqrt{ } \\
\text { Bank loan } & = & £ 28 \text { million } \sqrt{ } \\
\text { Retained profit } & = & £ 48 \text { million } \sqrt{ } \\
\text { Total } & = & £ 220 \text { million } \sqrt{ }
\end{array}
$$

6 marks

- part (b)

| Week | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $6000+800$ | $5500+400$ |  |
| Production | $6800 \sqrt{ }$ | $6800 \sqrt{ } \sqrt{ }$ | $5900 \sqrt{ } \sqrt{ }$ | $3200 \quad \sqrt{ }$ |

6 marks

- part (c)

|  | Week 1 | Week 2 | Week 3 | Week 4 |
| :---: | :---: | :---: | :---: | :---: |
| Option 1 | 56400 000V | $42300000 \sqrt{ }$ | $38775000 \sqrt{ }$ | 22560 000V |
| Option 2 | 0 | 0 | 0 | 0 |
| Option 3 | $\underline{1410000 \sqrt{ }}$ | $1057500 \sqrt{ }$ | $969375 \sqrt{ }$ | $564000 \sqrt{ }$ |
| Total | $\frac{57810000}{0 / \mathrm{f}}$ | $\frac{43357500}{o / f}$ | $\frac{39744375}{o / f}$ | $\frac{23124000}{0 / f}$ |

- part (d)

Answers may include:
Maximum of one tick per box

|  | Advantage | Disadvantage |
| :---: | :--- | :--- |
| Option 1 | Large amount of cash sale <br> made | - Total amount per customer is <br> less than option 3.(£11 750) <br> - May not help sales volume |
| Option 2 | May help sales of the new car | - No immediate cash inflow <br> - Total amount per customer is <br> less than option 3.(£11 750) <br> - Credit given but no interest <br> charged |
| Option 3 | - Total amount received per <br> customer is highest using this <br> option.(£11 975) <br> - May help sales of new car. | - Relatively small amount of <br> cash inflow received at sale <br> - - Risk of bad debts |

Conclusion
Option $1 / 2 / 3$ is the best option $\sqrt{ } \sqrt{ }$
> Question 5

- part (a) (i)

| Fixed Costs | $£(3800 \times 2) \sqrt{ }+(5700 \times 6) \sqrt{ }+(2440 \times 6) \sqrt{ }=£ 56440 \checkmark \sqrt{ } \sqrt{ }$ |
| :---: | :---: |
| Variable Costs | $(£ 3.60+4.25+0.20) \vee=£ 8.05 \mathrm{~V}$ |
| Contribution | $£ 14.95-£ 8.05=£ 6.90 \mathrm{~V}$ o/f |
| Break even point | $\frac{56440}{6.90} \mathrm{~V}^{\mathrm{V}} \mathrm{o} / \mathrm{f}$ |
|  | $=8180$ units $\sqrt{ } \mathrm{o} / \mathrm{f} \sqrt{ } \mathrm{C}$ |
|  |  |

10 marks

- part (a) (ii)

| Margin of Safety in units | $(8500-8180 \circ / \mathrm{f}) \vee=320$ units $\mathrm{V} \mathrm{o} / \mathrm{f}$ |
| :--- | :---: |
| Margin of safety in sales revenue | $(320 \mathrm{o} / \mathrm{f} \times £ 14.95) \sqrt{ }=£ 4784 \mathrm{~V} \circ / \mathrm{f}$ |
|  |  |

4 marks

- part (a) (iii)

| Sales | $8500 \times £ 14.95=£ 127075 \mathrm{~V}$ |
| :---: | :---: |
| Less Fixed Costs | $=(£ 56440) \sqrt{ } \mathrm{o} / \mathrm{f}$ |
| Less Variable Costs | $(£ 8500 \times 8.05)=(£ 68425) \sqrt{ } \mathrm{o} / \mathrm{f}$ |
| $=$ Profit | $=£ 2210 \mathrm{~V} \mathrm{o} / \mathrm{f}$ |
| OR |  |
| Contribution x Sales | $(8500 \times 6.90$ o/f) $\sqrt{ }=£ 58650 \mathrm{~V}$ o/f |
| Less fixed Costs | (£56 440) V o/f |
| = Profit | £2 210 V o/f |
| OR |  |
| Contribution x Margin of Safety | ( $£ 6.90$ V o/f $\times 320 \mathrm{~V}$ o/f) |
| $=$ Profit | £2 208 V , $\mathrm{o} / \mathrm{f}$ |

4 marks

- part (b)

| Contribution per unit must be | $=\frac{56440}{8500} \sqrt{ } \mathrm{~V}$ o/f $=£ 6.64 \mathrm{~V}$ o/f |
| :--- | :---: |
| Plus Variable costs per unit | $=£ 8.05 \mathrm{~V}$ o/f |
| Therefore, selling price must be | $=£ 14.69 \mathrm{~V}$ o/f $\sqrt{ } \mathrm{C}$ |
|  |  |

- part (c)

Answers may include:
Maintaining Output and decreasing Selling Price
Advantages - Reducing price may lead to higher sales, $\sqrt{ }$ when trading conditions are tough. $\sqrt{ }$
This may allow SHA Ltd to survive $\sqrt{ }$ until trading conditions improve $\sqrt{ }$, and competitors to fail. $\sqrt{ }$
No need to lay off any staff if output is not reduced, $\sqrt{ }$ which may involve redundancy costs etc. $\sqrt{ }$

Disadvantages - Reduction in price of $£ 0.26 \sqrt{ }$ is very little $\sqrt{ }$ and may have no effect on sales. $\sqrt{ }$
SHA Ltd may find they have unsold stock in these difficult conditions. $\sqrt{ }$ Kettles are not a necessity in a downturn $\sqrt{ }$ as substitutes exist $\sqrt{ }$ Break-even point will be higher $\sqrt{ }$ because contribution per unit is lower $\sqrt{ }$ Total sales revenue decreases $\sqrt{ }$

Maintaining Selling Price and decreasing Output
Advantages - Keeping the same selling price may mean SHA Ltd maintains market position $\sqrt{ }$ i.e. does not appear to go down market. $\sqrt{ }$
Avoids build up of unsold stock when trading is difficult $\sqrt{ }$
Could make a loss assembling kettles that cannot be sold, $\sqrt{ }$ so avoids unnecessary expense. $\sqrt{ }$
Break-even point does not decrease $\sqrt{ }$ because contribution per unit does not change.

Disadvantages - Total sales revenue decreases $\sqrt{ }$
Reducing output may see resources wasted/unused $\sqrt{ }$ e.g. materials, staff etc. $\sqrt{ }$ Fixed costs are spread over a smaller output, $\sqrt{ }$ so fixed costs per unit will rise. $\sqrt{ }$

Maximum of 4 marks for arguing one side

Conclusion - 2 marks
Should maintain output (or selling price) and decrease selling price (or output).
8 marks
Total 32 marks

Question 6

- part (a)

$$
\begin{aligned}
\text { Gearing ratio } & =\frac{\text { Prior charge capital }}{\text { Capital employed } \sqrt{ }} \times 100 \sqrt{ } \\
& =\frac{12625000 \sqrt{ }}{12625000 \sqrt{ }+22850000} \sqrt{ } \times 100=35.59 \% \sqrt{ }
\end{aligned}
$$

6 marks

- part (b) (i)

Return on Capital employed $=$ Net profit before interest and tax $\times 100$ Capital employed

$$
=\frac{£ 1575000}{£ 35475000} \sqrt{ } \times 100=4.44 \% \sqrt{ }
$$

3 marks

- part (b) (ii)

Earnings per ordinary share $=$ Net profit after interest and tax Issued ordinary shares

$$
=\frac{£ 818000}{30000000} \sqrt{ }=2.73 p \text { per share } \sqrt{ }
$$

3 marks

- part (b) (iii)

Price/earnings ratio

$$
\begin{aligned}
& =\frac{\text { Market price of share }}{\text { Earnings per share }} \\
& =V_{2.73 \mathrm{p}}^{\frac{53.0}{} \sqrt{ } / / \mathrm{f}}=19.4 \text { times } \sqrt{ } \mathrm{o} / \mathrm{f}
\end{aligned}
$$

3 marks

- part (b) (iv)

Dividend paid per share
$=$ Total ordinary dividend Issued ordinary shares
$=\frac{£ 616000}{30000000} \sqrt{ } \sqrt{ }=2.05$ p per share $\sqrt{ }$
3 marks

- part (b) (v)

| Dividend cover | $=\frac{\text { Net profit after interest and tax }}{\text { Total ordinary dividend }}$ |
| ---: | :--- |
|  | $=\frac{£ 818000}{£ 616000 \sqrt{ }=1.33 \text { times } \sqrt{ }} \$$ |

- part (b) (vi)

Dividend yield
$=\frac{\text { Dividend per share }}{\text { Market price of share }} \times 100$
$=\frac{2.05 p}{53 p} \sqrt{ }$ o/f $\times 100=3.87 \% \sqrt{ }$ o/f

- part (c)

Answers may include o/f rule applies

BETTER than Northern Gas plc
Gearing in Southern Gas is better $\sqrt{ }$ as Northern Gas has a ratio higher than $50 \%$ benchmark. $\sqrt{ }$
This makes Northern Gas a risky investment, $\sqrt{ }$ they have probably taken out loans, debt capital etc $\sqrt{ }$
ROCE is better $\sqrt{ }$ in Southern Gas by 0.5 percentage points. $\sqrt{ }$ Perhaps the large debt capital of Northern means the returns are lower $\sqrt{ }$ e.g. due to interest payments $\sqrt{ }$

W ORSE than Northern Gas plc
Earnings per ordinary share in Northern Gas are about 1 pence $\sqrt{ }$ per share higher which is better $\sqrt{ }$
Perhaps Northern have a smaller equity share base $\sqrt{ }$ which means EPS will be higher. $\sqrt{ }$

Maximum of 4 marks for arguing one side
Conclusion
Southern Gas plc as a business has performed better/worse than Northern Gas plc. $\sqrt{ } \sqrt{ }$
> Question 7

- part (a)

| Calculation of Purchase Price |  |  |  |
| :--- | ---: | ---: | :--- |
| Property, plant and equipment | $+1260000-943000$ | 49817000 | $\sqrt{ }$ |
| Trade and Other Receivables | Less 5\% | 729600 | $\sqrt{ }$ |
| Intangibles |  | 5740510 |  |
| Inventories |  | 4350000 |  |
| Cash and cash equivalents |  | 12890 | $\sqrt{ }$ need 3 |
| Bank Loan |  | $(6000000)$ |  |
| Trade and Other Payables |  | $(2410000)$ |  |
| Current tax payable |  | $(1240000)$ |  |
| Short term provisions |  | $(3000000)$ | $\sqrt{ }$ need 4 |
| Value of Net assets acquired |  | 48000000 | $\sqrt{ }$ o/f |
| Purchase price | $48000000 \times 1.5$ | 72000000 | $\sqrt{ }$ o/f |

6 marks

- part (b)

Calculation of goodwill $=(72000000 \mathrm{o} / \mathrm{f}-48000000 \mathrm{o} / \mathrm{f}) \mathrm{V}=£ 24000000 \mathrm{~V} \mathrm{o} / \mathrm{f}$
2 marks

- part (c)

Amount received per share $=£ 72000000 \mathrm{o} / \mathrm{f}=£ 3.00$ per share $\sqrt{ } \mathrm{o} / \mathrm{f}$ 24000000
Cash received per share $=£ 3.00-((4 \times 0.50)+(4 \times 0.22))$ premium $)$
Cash received per share $=£ 3.00-(£ 2.00 \sqrt{ }+88$ p premium $\sqrt{ })=12$ pence per share held $\sqrt{ }$

- part (d)

Statement of Financial Position
Sheung Wan Construction plc as at January $1^{\text {st }} 2014$

| Assets |  |  | $£$ |
| :---: | :---: | :---: | :---: |
| Non-current Assets |  |  |  |
| Property, plant and equipment | 829817000 | $\sqrt{ }$ |  |
| $\begin{aligned} & \text { Intangible assets }(16000000+5740510) \sqrt{ } \\ & +24000000 \sqrt{ } \end{aligned}$ | 45740510 | $\sqrt{ } \sqrt{ }$ |  |
|  |  |  | 875557510 |
| Current Assets |  |  |  |
| Inventories | 22850000 |  |  |
| Trade Receivables (12540 $000+729$ 600) | 13269600 | $\sqrt{ }(2)$ |  |
| Cash (7286000 + 12 890) $\sqrt{ }-2880000 \sqrt{ }$ | 4418890 | $\sqrt{ } \sqrt{ }$ |  |
|  |  |  | 40538490 |
| Total Assets |  |  | 916096000 |
|  |  |  |  |
| Equity and Liabilities |  |  |  |
| Equity |  |  |  |
| Ordinary Shares of $£ 0.50$ each | 548000000 | $\sqrt{ }$ |  |
| Share Premium(200000000 $\sqrt{ }+21120000 \sqrt{ }$ ) | 221120000 | $\sqrt{ } \sqrt{ }$ |  |
| Retained earnings | 44955000 | $\sqrt{ }$ |  |
|  |  |  | 814075000 |
| Non-current liabilities |  |  |  |
| 6.5\% Debenture 2017 | 25000000 |  |  |
| Bank Loan | 56000000 | $\sqrt{ }(2)$ |  |
|  |  |  | 81000000 |
| Current Liabilities |  |  |  |
| Trade Payables | 14060000 |  |  |
| Current tax payable (2721000 + 1240000) | 3961000 |  |  |
| Short term provisions | 3000000 | $\sqrt{ }(3)$ |  |
|  |  |  | 21021000 |
| Total Equity and Liabilities |  |  | 916096000 |

12 marks

- part (e)

Answers may include
FOR purchase
Goodwill received $\sqrt{ }$ Profit on realisation $\sqrt{ } 745600 \sqrt{ } \mathrm{o} / \mathrm{f}$
$£ 3.00$ received per share which is $£ 0.70 \sqrt{ }$ more than the share in Ngau Builders plc trading at $£ 2.30 \mathrm{~V}$
Larger firm may achieve benefits $\sqrt{ }$ eg economies of scale $\sqrt{ }$ and share price in Sheung Wan plc may rise in future. $\sqrt{ }$
Horizontal integration $\sqrt{ }$
Large liabilities on Ngau builders Statement of Financial Position $\sqrt{ }$ which another company can settle $\sqrt{ }$
Sheung Wan has a healthier Statement of Financial position $\sqrt{ }$ and is therefore a safer investment. $\sqrt{ }$
Reduces competition $\sqrt{ }$
AGAI NST purchase
Larger firm may lead to problems $\sqrt{ }$ eg diseconomies of scale $\sqrt{ }$ and share price in Sheung Wan may fall in future. $\sqrt{ }$
Reduced power of shareholder from Ngau Builders plc, $\sqrt{ }$ as large numbers of other shareholders in Sheung Wan Limited. $\sqrt{ }$
No control in new company $\sqrt{ }$
Maximum of 4 marks for arguing one side.

Conclusion
Purchase is beneficial/ not beneficial. 2 marks

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

