5. Interpretation of Accounts (100)

(a) **You are required to calculate the following for 2016:** (where appropriate calculations should be made to **two** decimal places.)

(i) Cash Sales if the average period of credit given to debtors is 1·5 months. (10)

Average period of credit given to debtors

$$= \frac{\text{Debtors}}{\text{Credit Sales}} \times \frac{12}{1} \quad = \quad 1{\cdot}5$$

$\Rightarrow$ Credit Sales

$$= \frac{\text{Debtors} \times 12}{1{\cdot}5} \quad = \quad \frac{45{,}000\ (2) \times 12\ (2)}{1{\cdot}5\ (1)}$$

$= {}^{\bullet\bullet}€360{,}000$ (1)

$\Rightarrow$ Cash Sales

= Total Sales – Credit Sales = 940,000 (1) – ${}^{\bullet\bullet\bullet}$360,000 (1)

= ${}^{\bullet\bullet\bullet}$€580,000 (2)

(ii) Return on Capital Employed. (8)

$$= \frac{\text{Net Profit + Debenture Interest}}{\text{Capital Employed}} \times \frac{100}{1} \quad = \quad \frac{62{,}000\ (1) + {}^{\bullet}20{,}000\ (2)}{995{,}000\ (2)} \times \frac{100}{1}\ (1)$$

= 8·24% (2)

• Must use figure for 'Interest Paid' (€20,000) and <u>not</u> calculate interest (8% of €250,000).

(iii) Interest Cover (8)

$$= \frac{\text{Net Profit before Interest}}{\text{Interest}} \quad = \quad \frac{62{,}000\ (2) + {}^{\bullet}20{,}000\ (2)}{{}^{\bullet}20{,}000\ (2)}$$

= ${}^{\bullet\bullet}$4·1 times (2)

• Must use figure for 'Interest Paid' (€20,000) and <u>not</u> calculate interest (8% of €250,000).

(iv) Dividend Yield. (12)

Dividend per Share

$$= \frac{\text{Total Ordinary Dividends}}{\text{Number of Ordinary Shares Issued}} \quad = \quad \frac{40{,}000\ (1) - 5{,}000\ (2)}{550{,}000\ (2)}$$

= ${}^{\bullet\bullet}$6·36 cent (1)

$\Rightarrow$ Dividend Yield

$$= \frac{\text{Dividend per Share}}{\text{Market Price per Share}} \times \frac{100}{1} \quad = \quad \frac{{}^{\bullet\bullet\bullet}6{\cdot}36\ (1)}{135\ (2)} \times \frac{100}{1}\ (1)$$

= ${}^{\bullet\bullet\bullet}$4·71% (2)

•• Award full marks for correct answer <u>even</u> if no workings are shown.
••• Allow full marks for student's own figure if consistent with previous work.

** Penalise 1 mark if ratios not given to two decimal places where appropriate.
** Penalise 1 mark if appropriate units (times, %, years) omitted from final answers.
** No deduction if '€' symbol omitted.
** Allow 3 marks for correct formula if no other work shown.

5. Interpretation of Accounts (cont'd.)

(a) (cont'd.)

(v) How long it would take one ordinary share to recover its value at present earnings. (12)

Earnings per Ordinary Share

$$= \frac{\text{Net Profit} - \text{Preference Dividend}}{\text{Number of Ordinary Shares Issued}} = \frac{62{,}000\ \textbf{(2)} - 5{,}000\ \textbf{(2)}}{550{,}000\ \textbf{(2)}}$$

$$= {}^{\bullet\bullet}10{\cdot}36 \text{ cent } \textbf{(1)}$$

⇒ Length of time to recover its value at present earnings

$$= \frac{\text{Market Price}}{\text{Earnings per Ordinary Share}} = \frac{135\ \textbf{(2)}}{{}^{\bullet\bullet\bullet}10{\cdot}36\ \textbf{(1)}}$$

$$= {}^{\bullet\bullet\bullet}13{\cdot}03 \text{ years } \textbf{(2)}$$

●● Award full marks for correct answer even if no workings are shown.
●●● Allow full marks for student's own figure if consistent with previous work.

** Penalise 1 mark if ratios not given to two decimal places where appropriate.
** Penalise 1 mark if appropriate units (times, %, years) omitted from final answers.
** No deduction if '€' symbol omitted.
** Allow 3 marks for correct formula if no other work shown.

(b) Indicate if the debenture holders would be satisfied with the performance, state of affairs and prospects of the company. Use relevant ratios and other information to support your answer. (40)

– debenture holders would be concerned with the following:

❶ Performance

(i) Profitability **(7)**
- in 2015, Return on Capital Employed / ROCE was 9·5% (1)
- in 2016, it is ●●8·24%, which is worse (1)
- disimproved by 1·26%, which indicates an unhealthy trend (1)
- if this trend continues, there is a risk of having to sell some of the fixed assets in order to repay the debenture holders (1)
- the return is still ahead of the return from risk-free investments of 1-2% (1)
- however, the return is only slightly above the 8% being paid on debentures / the rate being paid on debentures, which are secure (1)
- represents a less efficient use of resources in 2016 (1)

(ii) Dividend Policy **(7)**
- in 2015, Dividend Cover was 2·59 times (1)
- in 2016, it is ●1·63 times $\left[\frac{62{,}000 - 5{,}000}{40{,}000 - 5{,}000}\right]$ (1)
- Dividend Cover has worsened significantly (1)
- based on this year's profit of €62,000, ordinary share dividends of €35,000 are excessive (1)
- percentage of profits paid out in 2016 is ●61·40% $\left[\frac{35{,}000}{62{,}000 - 5{,}000} \times \frac{100}{1} \;/\; \frac{1}{1{\cdot}63} \times \frac{100}{1}\right]$, which is much higher than the figure of ●38·61% $\left[\frac{1}{2{\cdot}59} \times \frac{100}{1}\right]$ in 2015 (1)
- more of the profits should be retained (1) for the repayment of debentures (1)

5. Interpretation of Accounts (cont'd.)

(b) (cont'd.)

❷ State of Affairs

(iii) Liquidity (7)

- in 2015, the Quick Ratio / Acid Test Ratio was 0·95:1 (1)
- in 2016, the ratio is •0·73:1 $\left[\dfrac{110{,}000 - 55{,}000}{75{,}000}\right]$ (1)
- ratio has worsened in the last year (1)
- company has a liquidity problem as the ratio has fallen well below the ideal of 1:1 (1)
- the company now has only 73c available to pay every €1 owed in the short term (1)
- if this trend continues, the company may have difficulty paying its debts, including future interest (1), and funds will not be available for the purpose of repaying the debenture loan (1)

(iv) Gearing (7)

- in 2016, the Gearing Ratio is •35·18% $\left[\dfrac{250{,}000 + 100{,}000}{995{,}000}\right]$ (1)
- the company is low geared - not dependent on outside borrowings / not at risk from outside investors (1)
- in 2015, the ratio was 32% (1)
- debenture holders would be dissatisfied that gearing has slipped slightly from 2015 / the company is more dependent on outside borrowings / debt capital than in 2015 (1)
- in 2016, Interest Cover is ••4·1 times (1)
- ratio has worsened from 2015, when it was 5·2 times (1)
- worsening trend(s) should make the payment of both interest (and dividends) more difficult (1)

(v) Security - Real Value of the Assets (7)

- the debentures are secured on the fixed assets (1)
- the debenture holders would be interested in the size of the assets to ensure there is sufficient security for the loan (1)
- fixed assets of €960,000, of which intangible assets are €120,000, leaving net fixed assets excluding intangibles of €840,000 (1)
- it would be prudent to ascertain the real value of fixed assets as there are no write-offs like depreciation in the accounts (1)
- fixed assets cover over value of loan is •3·36 times $\left[\dfrac{750{,}000 + 90{,}000}{250{,}000}\right]$ / •3·28 times $\left[\dfrac{750{,}000 + 70{,}000}{250{,}000}\right]$ / •3·0 times $\left[\dfrac{750{,}000}{250{,}000}\right]$ (1)
- debenture holders should feel secure because of the excess in value of the fixed assets over the loan (1)
- debenture holders would be dissatisfied that investments which cost €90,000 now only have a value of €70,000 - shows poor investment policy (1)

• Penalise once for incorrect ratio figure but accept thereafter if used consistently.
•• Allow full marks for student's own figure if consistent with previous work.
** Figures in brackets show the breakdown of marks if answer incomplete.
** Accept student's own wording if equivalent meaning conveyed.
** Accept other appropriate material.
** For the purposes of presentation and clarity, headings and bullets are shown in this marking scheme but are not necessary in a student's answer.

5. Interpretation of Accounts (cont'd.)

(b) (cont'd.)

❸ Prospects

(vi) Sector (5)

- the company operates in the renewable energy sector - growing market with emphasis on the environment (1)
- prospects are good in the short term (1), helped by the availability of government grants and incentives to householders, *e.g.* insulation grants for homes / installation grants for solar heating panels / tax relief on home renovations (1)
- prospects are also good in the long term (1), particularly due to anticipated oil shortages and higher / fluctuating oil prices (1)

• Penalise once for incorrect ratio figure but accept thereafter if used consistently.
•• Allow full marks for student's own figure if consistent with previous work.
** Figures in brackets show the breakdown of marks if answer incomplete.
** Accept student's own wording if equivalent meaning conveyed.
** Accept other appropriate material.
** For the purposes of presentation and clarity, headings and bullets are shown in this marking scheme but are not necessary in a student's answer.

(c) Explain the difference between the terms 'Liquidity' and 'Solvency' when used in Ratio Analysis. Refer to relevant ratios in your explanation. (10)

❶ Liquidity (5)

- measures the ability (1) of the company to pay its short-term debts (1) as they fall due (1)
- Quick Ratio / Acid Test Ratio (1) is a good indicator of liquidity as it includes only liquid assets, *i.e.* cash and debtors (1)

❷ Solvency (5)

- measures the ability (1) of the company to pay all of its debts (1) as they fall due (1)

Any 2: (2 × 1)

- a business is solvent if its total assets exceed its outside liabilities
- most important indicator of a business's ability to survive in the long term
- Debt to Equity Ratio / Total Debt to Total Assets Ratio are good indicators of a company's solvency

** Figures in brackets show the breakdown of marks if answer incomplete.
** Must include underlined phrase or equivalent to award mark for explanation.
** Accept student's own wording if equivalent meaning conveyed.
** Accept other appropriate material.
** For the purposes of presentation and clarity, headings and bullets are shown in this marking scheme but are not necessary in a student's answer.