QUESTION 5

100 Marks

Interpretation of Accounts

Past Exam Questions & Dublin Examination Board

Debentures

This booklet includes the following

QUESTION 5

100 Marks

Analysis of Question 5

Interpretation of Accounts

Analyses of Question 5 - Interpretation of Accounts												
	Shareholder	Shareholder	Shareholder	Debentures	Bank	Shareholder	Investor	Bank	Friend	Shareholder	Bank	Debenture
Part A												
Cash Sales	21		19					14				
Cash Purchases				18		16				12		10
ROCE	21		19	18		16		14				
P/E Ratio	21	20	19	18		16	15	14	13	12	11	10
Dividend Cover	21		19			16				12		10
Interest Cover	21	20		18	17		15		13	12		10
Opening Stock		20					15		13		11	
Closing stock					17							
ROSF		20										
Dividend Yield		20	19	18	17	16	15	14	13		11	10
EPS					17		15	14	13		11	
Gearing											11	
ROSF					17							
PART B												
EPS	21	20	19	18	17	16	15	14	13	12	11	10
DPS	21	20	19	18	17	16	15	14	13	12	11	10
Interest Cover	21	20	19	18	17	16	15	14	13	12	11	10
Acid Test Ratio	21	20	19	18	17	16	15	14	13	12	11	10
ROCE	21	20	19	18	17	16	15	14	13	12	11	10
Gearing	21	20	19	18	17	16	15	14	13	12	11	10
Dividend Cover	21	20	19	18	17	16		14			11	10
Dividend Yield	21	20	19	18	17	16		14			11	10
Ordinary Share Holders	21	20	19			16				12		
Debenture Holders				18								10
Bank Manager					17			14			11	
Investor							15					
Friend									13			

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Part C												
Explain gearing						16						
Benefits of a lowly geared company						16						
Disadvantage of gearing	21											
Reduce the gearing	21					16						
How Stock Turnover can increase profitability		20										
Calculate Current Ratio			19									
Calculate Acid Test Ratio			19						13			
Analyses the liquidity position			19						13			
Analyses debtor day, creditor days and stock turnover				18								
Importance of financial info. to an employee					17							

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Part C												
Two other users of financial info.					17							
Limitations of Ratio Analysis							15				11	
Difference between Liquidity and Solvency								14				
Calculate the Gross profit %										12		
Reason for and increase/ decrease (5)										12		
Advice a friend thinking of investing (use relevant ratios)												10

QUESTION 5

100 Marks

Ratios with formula & comments

Interpretation of Accounts

RATIO	FORMULA	UNIT	COMMENT
Return on Capital Employed **(Profitability)**	Net Profit (Before Interest) x 100 / Capital Employed	Percentage (%)	1. Should be compare to risk free investments, dividend and preference shares 2. A company is profitable if their ROCE is higher than the return from risk free investments
Return on Shareholders' Equity **(Profitability)**	Net Profit (After Pref Dividend) x 100 / Capital Employed	Percentage (%)	1. This shows the return to stakeholder after the following have been paid a. Interest b. Taxes and c. Preference Dividends
Current Ratio **(Liquidity)**	Current Assets : Current Liabilities OR Current Assets / Current Liabilities	Ratio 2:1	1. This shows if the working capital (CA – CL) is enough to meet the day-to-day cost of the business 2. Recommended ratio is 2:1 3. This means that for every €1 owed by the business in the short term the business has €2 to pay
Acid Test **(Liquidity)**	Current Assets – Closing stock : Current Liabilities OR Current Assets – Closing stock / Current Liabilities	Ratio 1:1	1. The acid test ratio doesn't use closing stock as it is hard to convert it to cash quickly 2. A recommended ration is 1:1 3. Any it is a good indicator how liquid a company is

Stock Turnover **(Usually asked in Part A (i))**	Cost of Sales / Average Stock	Times	1. This shows the number of times in a year that average stock is sold 2. If this figure is lower, it could be an indicator that the business is slowing down 3. If this figure is high the business could run the risk of running out of stock due to a tight policy
Average Stock **(Usually asked in Part A (i))**	Opening + Closing Stock / 2	Euro	
Debtors Collection Period **(Usually asked in Part A (i))**	Debtors x 12/52/365 / Credit Sales	Months/Weeks/Days	1. This shows that amount of time it takes the business to collect form their debtors 2. The business should collect debt quickly this can be done by given a discount to invoice are paid before the due date
Creditors Collection Period **(Usually asked in Part A (i))**	Creditors x 12/52/365 / Credit Purchases	Months/Weeks/Days	1. This shows that amount of time it takes the business to pay their creditors (Debts) 2. Having a long credit period can help the business but they will lose out on discount

Gearing Ratio **(Total Capital)** **(Gearing)**	<u>Loan + debenture + Preference Shares x 100</u> Capital Employed	Percentage (%)	1. Lowly geared company = fixed interest is less than 50% 2. Highly geared company = fixed interest if higher than 50% 3. It's important that is business is not too dependent on outside finance (Borrowings) 4. As interest and dividend (Pref) must be paid even if a profit is not made
Gearing Ratio **(Equity Capital** **(Gearing)**	<u>Loan + debenture + Preference Shares x 100</u> Ordinary Shares issued + Reserves	Percentage (%)	1. Lowly geared company = fixed interest is less than 50% 2. Highly geared company = fixed interest if higher than 50% 3. It's important that is business is not too dependent on outside finance (Borrowings 4. As interest and dividend (Pref) must be paid even if a profit is not made
Interest Cover **(Gearing)**	<u>Net Profit Before Interest and Tax</u> Interest for the year	Times	1. This means the firms has money available for expansion, paying dividends and paying interest/loans
Dividend Cover **(Dividend Policy)**	<u>Net Profit (After Tax & Preference Dividend)</u> Ordinary Dividends	Times	1. This indicates the amount of earning/profit are being retained by the business 2. Retained earning help to increase share value – shareholder like to see a high dividend cover because of this It show the risk to dividend if profits decrease

Dividend Yield **(Dividend Policy)**	<u>DPS x 100</u> Ordinary Dividend	Percentage (%)	1. This shows the return to shareholders form their investment 2. It should be compared to risk free investments, debentures, and preference share
Dividend Per Share (DPS) **(Dividend Policy)**	<u>Ordinary Dividends</u> Ordinary Shares issued	Cent	1. This is the amount of dividend ordinary shareholders will receive per share owned
Dividend Pay-out **(Dividend Policy)**	<u>DPS x 100</u> EPS	Percentage (%)	1. The is the percentage of profit that is paid out to shareholders 2. Is should be as close to 50% as possible
Earnings Per Share (EPS) **(Share performance)**	<u>Net Profit (After Preference Dividend Paid)</u> Number of Ordinary Shares	Cent	1. This shows the profit coming from each ordinary share 2. It is expressed as a percentage 3. It shows investors how well their investment is being used

P/E Ratio **(Share Performance)**	Market Price Per Share Earnings Per Share	Years	1. This shows how long it will take and shareholder to get their investment back 2. It is expressed in years

QUESTION 5

100 Marks

Matching Game - Dominoes

Interpretation of Accounts

Start	Return on Capital Employed
PROFITABILITY RATIO Net Profit (Before Interest) x 100 Capital Employed **Answer** - in %	Return on Shareholders' Equity
PROFITABILITY RATIO Net Profit (After Pref Dividend) x 100 Capital Employed (Minus Debt) **Answer** - in %	Current Ratio
LIQUIDITY RATIO Current Assets : Current Liabilities **Answer** – Ideal ratio 2 : 1	Acid Test
LIQUIDITY RATIO Current Assets - Stock: Current Liabilities **Answer** – Ideal Ratio 1 : 1	Stock Turnover
ACTIVITY RATIO Cost of Sales Average Stock **Answer** – in Times	Average Stock
ACTIVITY RATIO Opening + Closing Stock 2 **Answer** – in Euro	Debtors Collection Period

ACTIVITY RATIO Debtors x 12/52/365 Credit Sales **Answer** – In Months/Weeks/Days	Creditors Collection Period
ACTIVITY RATIO Creditors x 12/52/365 Credit Purchases **Answer** – In Months/Weeks/Days	Gearing Ratio (Total Capital)
GEARING Loans + Debentures + Preference Shares x 100 Capital Employed **Answer** – In %//Ratio	Gearing Ratio (Equity Capital)
GEARING Loans + Debentures + Preference Shares x 100 Ordinary Shares Issues + Reserves **Answer** – In %//Ratio	Interest Cover
GEARING Net Profit Before Interest and Tax Interest for the year **Answer** – in Times	Earnings Per Share
INVESTMENT RATIOS Net Profit (After Preference Dividend Paid) Number of Ordinary Shares **Answer** – in Cent	P/E Ratio
INVESTMENT RATIOS Market Price Per Share Earnings Per Share (Sometimes DPS) **Answer** – in Years/Times	Dividend Per Share

INVESTMENT RATIOS Ordinary Dividends x 100 Number of Ordinary Shares **Answer** – in Cent	Dividend Cover
INVESTMENT RATIOS Net Profit (After Tax & Preference Dividend) Ordinary Dividend **Answer** – in Times	Dividend Yield
INVESTMENT RATIOS Dividend Per Share x 100 Share Price **Answer** – in %	Profit paid to shareholders
PROFITABILIY EPS x 100 DPS **Answer** – in %	Finish

QUESTION 5

100 Marks

Table with relevant headings for Part B

Interpretation of Accounts

PART B – SHARE HOLDER HEADINGS

Remember to use the following headings and ratios when commenting on part B. These will be used from a **share-holders point of view**

Performance		State of Affairs			Prospectus	
Profitability	**Dividend Policy**	**Liquidity**	**Gearing**	**Investment policy**	**Sector**	**Security**
1. ROCE	1. Dividend Cover	1. Acid Test	1. Gearing	1. Investment Policy	1. Sector	1. Security
2. EPS	2. DPS		2. Interest Cover			
	3. Dividend Yield					
	4. Dividend Pay out					

Try to use the following sentence to help you remember the headings for shareholder comments

Paul **D**oes **L**andscaping **G**ardening **I**n **S**pring & **S**ummer

NOTE

You might have to calculate some ratios still for part B – calculate them quickly using you calculator and make a record of the figure

DEBENTURES COMMENTS

Remember to use the following headings and ratios when commenting on part B. These will be used from a **Debentures point of view**

Performance		State of Affairs			Prospectus	
Profitability	**Dividend Policy**	**Liquidity**	**Gearing**		**Sector**	
1. ROCE	1. Dividend Cover	1. Acid Test	1. Gearing		1. Sector	
1. EPS	2. Dividend Pay out		2. Interest Cover			
			3. Security			

Try to use the following sentence to help you remember the headings for shareholder comments

Patricia **D**oyle **L**oves **G**rading **I**n **S**chool

NOTE

You might have to calculate some ratios still for part B – calculate them quickly using you calculator and make a record of the figure

QUESTION 5

100 Marks

Interpretation of Accounts

Past Exam Questions

Debentures

QUESTION 5

100 Marks

Interpretation of Accounts

Past Exam Questions

2018 – Born to Run

QUESTION

The following figures have been extracted from the final accounts of Born2Run plc, a retailerin the sportswear industry, for the year ended 31/12/2017. The company has an authorisedcapital of €650,000 made up of 400,000 ordinary shares at €1 each and 250,000 8% preference shares at €1 each. Born2Run plc has already issued 350,000 ordinary shares and 200,000 8% preference shares.

Trading and Profit and Loss Account for year ended 31/12/2017		
	€	**€**
Sales		880,000
Opening stock	60,000	
Closing stock	90,000	
Costs of goods sold		(560,000)
Operating expenses for year		(220,000)
Interest for year		(18,000)
Net profit for year		82,000
Dividends paid		(45,000)
Retained profit		37,000
Profit and loss balance 01/01/2017		43,000
Profit and loss balance 31/12/2017		80,000

Ratios and information for year ended 31/12/2016	
Earnings per ordinary share	20c
Dividend per ordinary share	10c
Interest cover	6.3 times
Quick ratio	1.3:1
Market value of one ord. share	€1.60
Return on capital employed	12.4%
Gearing	41%
Dividend cover	1.3 times
Dividend yield	6.25%

Balance Sheet as at 31/12/2017		
	€	**€**
Fixed Assets		650,000
Investments (market value 31/12/2017 €150,000)		200,000
		850,000
Current Assets	160,000	
Less Creditors: **amounts falling due within 1 year**		
Trade creditors	(80,000)	80,000
		930,000
Financed by:		
6% Debentures (2024 secured)		300,000
Capital and Reserves		
Ordinary shares @ €1 each	350,000	
8% Preference shares @ €1 each	200,000	
Profit and loss balance	80,000	630,000
		930,000

Market value of one ordinary share on 31/12/2017 is **€1.35**.

(a) **You are required to calculate the following for 2017**: (where appropriatecalculations should be made to **two** decimal places).

(i) Cash purchases if the period of credit received from trade creditors is2½ months.

(ii) Dividend yield.

(iii) Price earnings ratio.

(iv) Return on capital employed.

(v) Interest cover. (50)

(b) Indicate whether 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)

(c) Born2Run plc is considering expansion by purchasing a small sportswear company. Ithas obtained the following information relating to this company:

	2014	**2015**	**2016**	**2017**
Period of credit allowed to debtors	60 days	54 days	46 days	40 days
Period of credit received from creditors	20 days	26 days	30 days	34 days
Stock turnover	12 times	11 times	9 times	6 times

Having analysed the information in the above table, what advice would you give Born2Run plc regarding this purchase?

(10)

(100 marks)

Q.5 Interpretation of Accounts **50**

(a)

(i) Cash purchases if the period of credit received from trade creditors is 2½ months

$$\frac{\text{Creditors}}{\text{Credit purchases}} \times 12 = 2\tfrac{1}{2} \text{ months}$$

$$\frac{80{,}000}{X} \times 12 = 2\tfrac{1}{2} \qquad 960{,}000 = 2\tfrac{1}{2}x \qquad x = 384{,}000$$

Total purchases = cost of sales + closing stock – opening stock
560,000 + 90,000 – 60,000 = 590,000

Cash purchases = total purchases – credit purchases
590,000 – 384,000 = €206,000 [12]

(ii)

$$\text{Dividend yield} = \frac{\text{dividend per share}}{\text{market value}} \times 100 = x\%$$

$$\text{DPS} = \frac{\text{ordinary dividend}}{\text{market value}} \times 100 = \frac{29{,}000}{350{,}000} \times 100 = 8.29 \text{ cent}$$

$$\text{Dividend yield} = \frac{\text{dividend per share}}{\text{market value}} \times 100 = \frac{8.29}{135} \times 100 = 6.14\%$$ [10]

(iii)

$$\text{Price earnings ratio} = \frac{\text{market value}}{\text{earnings per share}} = x \text{ years}$$

$$\text{Earnings per share} = \frac{\text{net profit – preference dividend}}{\text{no. of issued ordinary shares}} \times 100 = x \text{ cent}$$

$$\text{EPS} = \frac{82{,}000 - 16{,}000}{350{,}000} = \frac{66{,}000}{350{,}000} \times 100 = 18.86 \text{ cent}$$

$$\text{P/E Ratio} = \frac{\text{market value}}{\text{earnings per share}} \quad \frac{135}{18.86} = 7.16 \text{ years}$$ [10]

(iv)

$$\text{Return on capital employed} = \frac{\text{net profit + interest}}{\text{capital employed}} \times 100 = x\%$$

$$\frac{82{,}000 + 18{,}000}{930{,}000} \times 100 = 10.75\%$$ [9]

(v)

Interest cover = $\frac{\text{net profit + interest}}{\text{interest}}$

$\frac{82,000 + 18,000}{18,000}$ = 5.56 times [9]

(b) **40**

The debenture holders would **not be** satisfied with the performance, state of affairs and prospectsof the company for the following reasons: [4]

Performance

Profitability [7]

The company is profitable earning a return on capital employed in 2017 of 10.75% which is well above the return from risk-free investments of 2% and the cost of borrowing of 6%. Profitability,however, has disimproved (negative trend) by 1.65% compared to 2016 when the return was 12.4%. Born2Run plc is definitely making less efficient use of its resources this year and the debenture holders would not be pleased with the dip in performance in 2017.
The earnings per share has fallen from 20 cent in 2016 to 18.86 cent in 2017. This is also anegative trend and cause for concern.

Dividend Policy [4]

The dividend cover is 2.28 times and this is an improvement on last year's dividend cover of 1.3times (2 times). Debenture holders would be happy that Born2Run plc is retaining more of its profits for expansion and future repayments of loans.
The percentage of the profits distributed to shareholders is 43.96% which is an improvement onthe 50% distributed in 2016.

If there is any evidence that candidates' dividend cover figure has been affected by the incorrectdividend cover figure in 2016 accept candidates own figure for dividend cover.

State of Affairs

Liquidity [7]

Born2Run plc has liquidity problems with an acid test ratio of 0.88:1, for every €1 of short-term debt the firm has only 88 cent in liquid assets. This is also a disimproving trend compared to 2016 when the acid test ratio was 1.3:1. The worsening of the ratio is a major cause of concern to debenture holders because the company may have difficulty paying future interest. If this trend continues, the ability to pay interest would come under pressure and funds would not be availableto invest for the purpose of repaying the loan.

Gearing [7]

Born2Run plc is highly geared with a debt to capital employed of 53.76% and a debt to equity ratioof 116.28%. The company's long-term finance is sourced more by long-term debt than by equity which means it is a higher risk and will have high interest payments. The gearing position has worsened from 2016 when it was lowly geared with a gearing percentage of 41%. Born2Run are now more dependent on outside borrowing.
Interest cover has worsened from 6.3 times in 2016 to 5.5 times in 2017. The company is still wellable to meet its interest commitments, but the worsening trend combined with poor liquidity would concern debenture holders.

Security [6]

Fixed assets are valued at €650,000. Debenture holders would like to know does this reflect their true value and has depreciation been accounted for. However, as the debentures are €300,000, it would appear that there is more than adequate security to cover the loans.
Born2Runplc also has investments which cost €200,000 but the debenture holders would be disappointed at the fact that the investments now have a market value of €150,000. This wouldindicate poor investment decisions by management.

Prospects

Sector [5]

Short-term prospects are not that encouraging due to the fact that the company operates as a retailer in the sportswear industry, which is highly competitive, with leading brands dominatingthe industry. Long-term prospects are better with rising incomes and a greater emphasis on keeping fit and buying new sportswear, on a regular basis. However to protect itself from the intense competition in the industry, Born2Run would need to spend large amounts of money on brandproliferation and advertising but considering their current liquidity situation, this may prove difficult.

(c)

10

Period of credit allowed to debtors

The length of time it takes a debtor to settle their account has improved by 20 days (from 60 daysto 40 days). This is a good trend. The liquidity position of the business is improving as it is collecting debts more efficiently/quickly. However, while its liquidity position has improved, the collection period from debtors is longer than the average credit period of 34 days received from creditors.

Period of credit received from creditors

The length of time the business has to settle accounts with suppliers has improved by 14 days. (Ithas increased from 20 – 34 days.) This is improving the liquidity position as it is taking longer to settle its accounts with suppliers. However, the business may lose out on discounts for prompt payment which may have a negative effect on its liquidity.

Stock Turnover

Stock turnover has worsened. It has fallen from 12 times to 6 times. This is a negative trend. Theliquidity position of the business has worsened as it is taking much longer to sell stock. This may mean it may have too much money tied up in stock, when it could have been used for other purposes. If the decrease in stock turnover is as a result of decreasing sales, this will also have a negative effect on liquidity as it will have less revenue.

I would not recommend that Born2Run plc should invest in this business.

DEBENTURES COMMENTS – Born to Run

Remember to use the following headings and ratios when commenting on part B. These will be used from a **Debentures point of view**

Performance		State of Affairs			Prospectus	
Profitability	**Dividend Policy**	**Liquidity**	**Gearing**		**Sector**	
2. ROCE	2. Dividend Cover	2. Acid Test	2. Gearing		2. Sector	
2. EPS	3. Dividend Pay out		4. Interest Cover			
			5. Security			

Try to use the following sentence to help you remember the headings for shareholder comments

Patricia **D**oyle **L**oves **G**rading **I**n **S**chool

NOTE

You might have to calculate some ratios still for part B – calculate them quickly using you calculator and make a record of the figure

PERFORMANCE

PROTIFABILITY

Return on capital employed

1. In 2017 the ROCE is 10.75%. In 2016 the ROCE was 12.4%
2. This is a dis-improvement of 1.65% and is a negative trend
3. **The company is profitable as the return is higher than risk free investment of 1-2%**
4. **It is also above the debenture rate interest of** 6% **And Preference share capital rate of** 8%
5. **Debentures would be dissatisfied - as the company is making less efficient use of its resources available to them**

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend
> 3. Say if the company is profitable – compare to risk free investments
> 4. Compare to debenture & preference rates
> 5. Would Debenture holders be satisfied/dissatisfied?

Earnings Per share

1. In 2017 the EPS is 18.86c. In 2016 the EPS was 20c
2. This is a dis-improvement of 1.14c and is a negative trend
3. **Debentures would be dis- satisfied with this as it indicates the profit in cents coming from shares and how well shareholder investment is used**

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend
> 3. Would Debenture holders be satisfied/dissatisfied?

DIVIDEND POLICY

Dividend Cover

1. In 2017 the Dividend cover is 2.28 times, In 2016 the Dividend cover was 1.3 times
2. This is an improvement and is a positive trend. **It means more profit is being retained for expansion purpose and repayment of loans**
3. **Debenture holders would be satisfied with this**

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend
> 3. Would Debenture holders be satisfied/dissatisfied?

Dividend Pay-out

1. In 2017 the Dividend pay-out is 43.96%. In 2016 the Dividend pay-out was 50%
2. This is an improvement and a Positive trend
3. **Debenture holder would be satisfied with this as the company should have enough retained for expansion and paying interest.**

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend
> 3. Would Debenture holders be satisfied/Dissatisfied?

Note – This can also be included under Profitability

NOTE On Dividend Pay-Out

1. Dividend pay-out should be in and around 50% for shareholders to be happy (Debenture holder would accept less)
2. If above 50% - they are paying out too much dividend – this means that debenture holders will not be happy as the company is not retaining enough money for expansion and paying interest. Shareholder will not be happy either as it is not good for the long-term stability of the company (even though they are receiving a higher dividend)
3. If below 50% - share holders will not be happy, are they would expect a higher return. Debenture holders would be happy as the company should have enough retained for expansion and paying interest.
4. Formula to calculate Dividend pay out is = DPS/EPS x 100/1 = %

STATE OF AFFAIRS

LIQUIDITY

Acid Test Ratio

1. In 2017 the acid test ratio was 0.88:1. In 2016 the acid test ratio was 1.3:1
2. This is a dis- improvement of .42c and is below **the recommended ratio of 1:1**
3. Born-to-run PLC does have a liquidity problem and will not be able to pay their debts as they fall due in the short term. **This is because they have** €.88 **in liquid assets for every euro it owes in the short term**
4. **Debenture holders will be un-satisfied as Born to Run PLC will find it difficult paying interest or other short terms debts as they fall due**
5. **If this trend continues, the ability to pay interest would come under pressure and funds would not be available to invest for the purpose of repaying the loan.**

1. Say what you see – compare to previous years
2. Is this an improvement/dis-improvement, positive or negative trend (compare to recommended ratio)
3. Does it have a liquidity problem – can they pay debts in the short term
4. Would Debenture holder be satisfied/dis-satisfied

GEARING

Gearing

1. In 2017 the gearing ratio is 53.76%. In 2016 the gearing ratio was 41%
2. This is a dis-improvement and is a negative trend. The company is a highly geared company
3. **This means the company is dependent on outside borrowing and would appear to be of a risk from outside investors. Debenture holders would be dissatisfied as the business is dependent on outside borrowing and would will be paying higher interest payment**
   However, if using the Debt to equity ratio if is a negative trends as it has disimproved from to 116.28%% this is a negative trend
4. **Shareholders would be dis-satisfied as the company is now more dependent on outside borrowing than before and there is significant risk to the firm from outside investors.**
   The business is highly geared and is financed more by debt than by equity.

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend and it the company is a lowly/highly geared company.
> 3. Does it depend on outside borrowing
> 4. Would Shareholder be satisfied/dis-satisfied

Interest Cover

1. In 2017 the Interest Cover is 5.5 times. In 2016 the interest cover was 6.3 times
2. This is a dis-improvement and is a negative trend
3. **This means the firms has less money available for expansion, paying dividends and paying interest/loans**
4. The company is still well able to meet its interest commitments, but the worsening trend combined with poor liquidity would concern debenture holders
5. **However, the Debentures are not listed for repayment until 2024. Born to Run plc had enough time to put aside resources to be able to repay these when the time comes.**

> 1. Say what you see – compare to previous years
> 2. Is this an improvement/dis-improvement, positive or negative trend.
> 3. What does it mean – is there enough money for expansion, paying dividends and interest
> 4. Would Shareholder be satisfied/dis-satisfied
> 5. Make reference to when the debenture will be paid off
> 6. Will investment help with paying debenture

Security

1. Fixed assets are valued at €650,000.
2. **Debenture holders would like to know does this reflect their true value and has depreciation been accounted for**

3. However, as the debentures are €300,000, it would appear that there is more than adequate security to cover the loans.
4. Born2Runplc also has investments which cost €200,000 but the debenture holders would be disappointed at the fact that the investments now have a market value of €150,000.
5. **This is a negative trend and indicates poor investment decisions by management.**

> 1. What are the fixed assets
> 2. Do they show the true value
> 3. How much are eh debentures – is there enough now to repay them
> 4. How are investment cost performing
> 5. Is this a negative trend

PROSPECTS

SECTOR

Sector

1. Born To Run plc is in the sportwear retail sector.
2. **In the short term** prospects are not that encouraging due to the fact that the company operates as a retailer in the sportswear industry, which is highly competitive, with leading brands dominating the industry.
3. **In the long term**, are better with rising incomes and a greater emphasis on keeping fit and buying new sportswear, on a regular basis. However to protect itself from competition Born2Run would need to spend large amounts of money on brand proliferation and advertising but considering their current liquidity situation, this may prove difficult.

> 1. Say what sector the business is
> 2. Say what the short-term goals are
> 3. Say what the long-term goals are

Overall

The debenture holders would not be satisfied with the performance, state of affairs and prospects of the company

QUESTION 5

100 Marks

Interpretation of Accounts

Past Exam Questions

2010 – Hebe PLC

QUESTION

The following figures have been extracted from the final accounts of Hebe plc, a manufacturer in the dairy industry. The company has an authorised capital of €600,000 made up of 500,000 ordinary shares at €1 each and 100,000 10% preference shares at €1 each. Hebe plc, has already issued 400,000 ordinaryshares and 50,000 of the 10% preference shares.

Trading and Profit and Loss account foryear ended 31/12/2009

		€
Sales		960,000
Opening stock	60,000	
Closing stock	65,000	
Costs of goods sold		(725,000)
Operating expenses for year		(140,000)
Interest for year		(30,000)
Net Profit for year		65,000
Dividends paid		(50,000)
Retained Profit		15,000
Profit and Loss Balance 01/01/2009		40,000 cr
Profit and Loss Balance 31/12/2009		55,000

Ratios and information for year ended 31/12/2008

Earnings per Ordinary Share	21c
Dividend per Ordinary Share	15c
Interest cover	4.7 times
Quick Ratio	1:1
Market Value of one Ordinary Share	€1.80
Return on Capital Employed	13%
Gearing	37%
Dividend cover	1.4 times
Dividend yield	8.3%

Balance Sheet as at 31/12/2009

			€
Intangible Assets			180,000
Tangible Assets			520,000
Investments (market value €95,000)			120,000
			820,000
Current Assets (Closing Stock €65,000 and Debtors 45,000)		110,000	
Trade Creditors	77,000		
Bank	48,000	(125,000)	(15,000)
			805,000
8% Debentures			300,000
(2014/2015)Issued Capital			
Ordinary Shares @ €1 each		400,000	
10% Preference Shares @ €1 each		50,000	
Profit and Loss Balance		55,000	505,000
			805,000

You are required to calculate the following for 2009:

(a) (i) The Interest Cover
(ii) The Cash Purchases if the average period of credit received from trade creditors is 2 months.
(iii) The Ordinary Dividend Cover
(iv) The Market Price if P/E is 10
(v) The Dividend Yield. (45)

(b) Indicate whether 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)

(c) A friend of yours has been given the opportunity to buy ordinary shares in Hebe plc but before doing so asks your opinion. What advice would you give? Use ratios, percentages and any other information from the above to support your conclusions. (15)

ANSWER

45

(a)

(i) Interest Cover

$$\frac{\text{Net Profit before interest}}{\text{Interest}} \quad \frac{65,000 + 30,000}{30,000} = \textbf{3.17 times} \ [8]$$

(ii) Cash Purchases

$$\frac{\text{Creditors}}{\text{Credit Purchases}} \times 12 = 2 \qquad \frac{77,000 \times 12}{2} = 462,000$$

(opening stock + purchases – closing stock = cost of sales)
(Purchases = 725,000 – 60,000 + 65,000 = 730,000)

Cash Purchases 730,000 – 462,000 = **268,000** [10]

(iii) Dividend Cover

$$\frac{\text{Net Profit after Preference Dividend}}{\text{Ordinary Dividend}} \quad \frac{65,000 - 5,000}{45,000} = \textbf{1.33 times} \ [8]$$

(iv) Market Price

$$\frac{\text{Market Price}}{\text{EPS}} = 10 \qquad \frac{\text{Market Price}}{15} = 10 = \textbf{150 cent} \ [9]$$

(v) Dividend Yield

$$\frac{\text{Dividend per share}}{\text{Market Price}} \times 100 \qquad \underline{11.25 \times 100} = \textbf{7.5\%} \ [10]$$

40

The debenture holders would be **concerned** with the following:

Dividend Policy [7]

The dividend cover is 1.33 times. Last year's dividend cover was 1.4 times. This is a worseningtrend. The DPS last year was 15c while this year it is 11.25c. Based on this year's profit of €65,000, the dividends proposed of €50,000 are excessive. More of the profits should be retained for the repayment of debentures. The % of profits given out is 75%. In 2008, the % given out was71%.

Security - Real Value of the Assets [7]

The debentures are secured on the fixed assets. The debenture holders would be interested in thesize of the assets to make sure that there is enough security for the loan. There are fixed assets of €820,000 of which, intangible assets are €180,000 leaving net assets excluding intangibles of €640,000. It would be prudent to ascertain the real value of fixed assets as there are no write-offs like depreciation. However, the debenture holders would feel secure because of the excess in valueof fixed assets over the loan of €300,000. There are investments of €95,000 but the debenture holders would be disappointed at the fact that the investments have dropped from their value of€120,000.

Profitability [7]

The return on capital employed for 2009 is 11.80%. Last year the return was 13%. It has disimproved by 1.20% and this fall indicates an unhealthy trend. If this downward trend continues, there is a risk of having to sell the fixed assets in order to repay debentures. The company is in a profitable position as the return of 11.80% is better than the return from risk free investments of lessthan 5% and is above the debenture interest rate of 8%. The company is making <u>less</u> efficient use ofresources this year.

Liquidity [7]

The company has a very serious liquidity problem. Last year the quick ratio was 1:1 but this year the quick ratio has fallen to 0.36:1. The company now has only 36c available to pay every €1 owedin the short term. The worsening of the ratio indicates a difficulty in paying debts including future interest. If this trend continues, the ability to pay interest would come under pressure and funds would not be available to invest for the purpose of repaying the loan.

Gearing [7]

The company is lowly geared. In 2009, the gearing was at 43.48%. The gearing has worsened from37% of total capital in 2008. Interest cover was 4.7 times but is now down to 3.2 times. This worsening trend could make interest payments more difficult.

Sector [5]

The overall worsening state of the economy is having a very negative effect on the dairy industryand there are also risks of over production and low cost competition.
The long term prospects are not encouraging in the dairy industry due to outside influences.

Question 5 (c)

15

I would advise my friend **not** to buy shares in Hebe plc for the following reasons: [3]

Share Price [4]
The share value has fallen from €1.80 to €1.50 [30c] since 2009 and is likely to continue in its downward movement based on current year performance. There is a lack of stock market confidence and may discourage investment.

Dividends [4]
Dividend per share is 11.25c. The dividend per share has dropped from 15c
The dividend yield has dropped from 8.3% to 7.5%. Whilst the rate is good the trend is not.

Reserves [2]
The dividend cover is low and dropping. The firm is not retaining enough profits to build up reserves.The company's dividend cover has dropped from 1.4 times to 1.33 times.

Sector [2]
Dairy industry is not performing well and future is unsure.

Liquidity
Company has a serious liquidity problem. The company now has only 36c available to pay every €1owed in the short term.

Profitability
Profitability is worsening. The return on capital employed for 2009 is 11.80%. Last year the returnwas 13%. It has disimproved by 1.20% and this fall indicates an unhealthy trend.

Price Earnings Ratio
Ratio is ten. It would take 10 years to earn back current price at current earnings.

QUESTION 5

100 Marks

Interpretation of Accounts

Past Exam Questions

2006 – Sawgrass PLC

QUESTION

The following figures have been taken from the final accounts of Sawgrass Plc., a manufacturer in the dairy industry, for the year ended 31/12/2005. The company has an Authorised Capital of €500,000 madeup of 400,000 €1 Ordinary shares and 100,000 6% Preference shares.

Trading and Profit and Loss account foryear ended 31/12/2005

	€
Sales	890,000
Cost of sales	(695,000)
Total operating expenses for the year	(120,000)
Interest for year	(20,000)
Net Profit for year	55,000
Proposed dividends	(48,000)
Retained profit for year	7,000
Profit and Loss balance 1/1/2005	40,000
cr.Profit and Loss Balance 31/12/2005	47,000

Ratios and figures for year ended 31/12/2004

Interest cover	5 times
Quick ratio	1.2:1
Earnings per ordinary share	19c
Return on capital employed	14.2%
Market value of ordinary share	€2.10
Gearing	35%
P/E ratio	10 years
Dividend per ordinary share	18c

Balance Sheet as at 31/12/2005

	€	€
Intangible Assets	150,000	
Fixed Assets	320,000	
Investments (market value €90,000)	105,000	575,000
Current Assets (including Stock €45,000 and Debtors €48,000)	98,000	
Creditors trade	(28,000)	
Proposed dividends	(48,000)	22,000
		597,000
10% Debentures		200,000
(2010/2011)Issued capital		
300,000 Ordinary shares @ €1 each	300,000	
50,000 6% Preference shares @ €1 each	50,000	
Profit and Loss balance.	47,000	397,000
		597,000

Market value of one ordinary share is €2.

You are required to provide answers to the following:

(a) Calculate the following for the year 2005:

1. Interest cover.
2. Earnings per share.
3. Cash sales if the average period of credit given to debtors is 2 months.
4. How long it would take one ordinary share to recoup (recover) its 2005 marketprice based on present dividend pay out rate.
5. Dividend yield on ordinary shares **for 2004**. (45)

(b) Indicate whether the Debenture holders would be satisfied with the policies and state of affairs of the company. Use available relevant information to support your answer.(40)

(c) What actions would you advise the company to take? (15)

(100 marks)

ANSWER

45

Interest Cover

$$\frac{\text{Net profit before interest}}{\text{Interest}} = \frac{75,000}{20,000} = 3.75 \text{ times } (9)$$

Earnings per share

$$\frac{\text{Net profit after Pref Div}}{\text{Number of ordinary shares}} = \frac{52,000}{300,000} = 17.33c\ (9)$$

Cash Sales

$$\frac{\text{Debtors x 12}}{\text{Credit sales}} = 2 \quad \text{Credit Sales} = \frac{48,000 \times 12}{2}$$

Credit sales = 288,000

Cash sales = 890,000 – 288,000 = €602,000 (9)

Period to recoup price

$$\frac{\text{Market price}}{\text{Dividend per share}} = \frac{200}{15} = 13.34 \text{ years } (9)$$

Dividend yield for 2004

$$\frac{\text{Dividend per share x 100}}{\text{Market price}} = \frac{18 \times 100}{210} = 8.57\%\ (9)$$

The debenture holders would be dissatisfied with the following: 40

Dividend Policy (7)

Based on this years earnings the dividends proposed €48,000 are excessive. The dividend coveris 1.15 Times. More of the profits should be retained or put aside for the repayment of the debentures.

Security - Real value of Fixed assets (7)

The debentures are secured on the fixed assets. The debenture holders would be interested in thesize of the assets to make sure that there is enough security for the loan. There are fixed assets of €575,000 of which, intangible assets are €150,000 leaving net assets excluding intangibles of €425,000. It would be prudent to ascertain the real value of fixed assets. However the debenture holders would feel secure because of the excess in value of fixed assets over loan, particularly because of the investments of €90,000.

Profitability (7)

The return on capital employed for 2005 is 12.56%. Last year the return was 14.2%. This fall indicates an unhealthy trend. The company is in a profitable position as the return of 12.56% is better than the return from risk free investments of less than 5% and is above the debenture interest rate of 10%. If the downward trend continues there is a risk of having to sell the fixed assets in order to repay debentures.

Liquidity (7)

The company has a serious liquidity problem. Last year, the quick ratio was 1.2:1. This year the quick ratio has fallen to 0.7:1. The company now has only 70c available for every euro owed in the short term. The worsening of the ratio indicates a difficulty paying debts including future interest. If this trend continues ability to pay interest would come under pressure and funds would not be available to invest forthe purpose of repaying loan.

Gearing - Interest Cover (7)

The company is lowly geared. In 2005, the gearing was at 41.8%. The gearing has slipped from 35% of total capital in 2004. Interest cover was 5 times but is now down to 3.75 times.This worsening trend could jeopardise interest payment

Sector (5)

The long–term prospects are not encouraging in the dairy industry. There is a risk of over production andlow cost competition.

Market Value

The market value of one share in 2004 was €2.10 while in 2005 it has dropped to €2. The earnings per share has dropped from 19c to 17.33c. The share may be overpriced as it takes 11.54 years to recover its market price.These would indicate a lack of public confidence in the company and may discourage investment.

15

(c) Raise cash and improve liquidity by:

1. Paying out lower dividends
2. Selling investments rather than issuing debentures.
3. Issuing more shares.
4. Improving gross profit percentage of 21.9% by reducing cost of sales or by passing on the increased costs.
5. Diversifying into other areas
6. Collection of debts more quickly
7. Sale and lease back

QUESTION 5

100 Marks

Interpretation of Accounts

Dublin Examination Board

Debentures

QUESTION 5

100 Marks

Interpretation of Accounts

Dublin Examination Board

2017 – Boyne PLC

QUESTION

The following figures have been taken from the final accounts of Boyne plc, a company involved in therenewable energy industry, for the year ended 31/12/2016. The company has an authorised capital of €950,000 made up of 750,000 ordinary shares at €1 each and 200,000 5% preference shares at €1 each.The firm has already issued 550,000 ordinary shares and 100,000 of the preference shares.

Trading and Profit and Loss Account for year ended 31/12/2016	
	€
Sales	940,000
Cost of goods sold	(670,000)
Operating expenses for year	(188,000)
Interest for year	(20,000)
Net Profit for year	62,000
Dividends paid	(40,000)
Retained Profit	22,000
Profit and Loss balance 01/01/2016	53,000
Profit and Loss balance 31/12/2016	75,000

Ratios and information for year ended 31/12/2015	
Earnings per Ordinary Share	12·7c
Dividend per Ordinary Share	4·9c
Interest Cover	5·2 times
Quick Ratio	0·95:1
Return on Capital Employed	9·5%
Market value of one ordinary share	€1·60
Gearing	32%
Dividend Cover	2·59 times

Balance Sheet as at 31/12/2016			
	€	**€**	**€**
Fixed Assets			
Intangible Assets			120,000
Tangible Assets			750,000
Investments (market value 31/12/2016 – €70,000)			90,000
			960,000
Current Assets (incl. Stock €55,000 and Debtors €45,000)		110,000	
Less Creditors: amounts falling due within 1 year			
Trade Creditors	60,000		
Bank Overdraft	15,000	(75,000)	35,000
			995,000
Financed by			
8% Debentures (2021 secured)			250,000
Capital and Reserves			
Ordinary Shares @ €1 each		550,000	
5% Preference Shares @ €1 each		100,000	
Profit and Loss balance		75,000	725,000
			995,000

Market value of one ordinary share **€1·35** on **31/12/2016**.

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

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

(ii) Return on Capital Employed.

(iii) Interest Cover.

(iv) Dividend Yield.

(v) How long it would take one ordinary share to recover its value at present earnings. (50)

(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)

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

ANSWER

(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

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

$\Rightarrow$ Credit Sales

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

$= \ ^{\bullet\bullet}$€360,000 **(1)**

$\Rightarrow$ Cash Sales

= Total Sales – Credit Sales = 940,000 **(1)** – •••360,000 **(1)**

= •••€580,000 **(2)**

(ii) Return on Capital Employed. (8)

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

= 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)

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

= ••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

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

= ••6·36 cent **(1)**

$\Rightarrow$ Dividend Yield

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

= •••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.

(a) (cont'd.)

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

Earnings per Ordinary Share

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

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

⇒ Length of time to recover its value at present earnings

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

$= {}^{\bullet\bullet\bullet}13{\cdot}03$ years **(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.

(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:

<u>Performance</u> ❶

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 assetsin 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 ratebeing paid on debentures, which are secure (1)
- represents a less efficient use of resources in 2016 (1)

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 €35,000are 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% ● $\left[\frac{1}{2\ 59} \times \frac{100}{1}\right]$ in 2015 (1)
- more of the profits should be retained (1) for the repayment of debentures (1)

(b) (cont'd.)

❷ State of Affairs

(ii) Liquidity **(7)**

- in 2015, the Quick Ratio / Acid Test Ratio was 0·95:1 (1)
- in 2016, the ratio is •0·73:1 $\left[\frac{110{,}000 - 55{,}000}{75{,}000}\right]$ (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, includingfuture interest (1), and funds will not be available for the purpose of repaying the debenture loan (1)

(iii) Gearing **(7)**

- in 2016, the Gearing Ratio is •35·18% $\left[\frac{250{,}000 + 100{,}000}{995{,}000}\right]$ (1)
- the company is low geared - not dependent on outside borrowings / not at riskfrom 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) moredifficult (1)

(iv) 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 thereis sufficient security for the loan (1)
- fixed assets of €960,000, of which intangible assets are €120,000, leavingnet 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-offslike depreciation in the accounts (1)
- fixed assets cover over value of loan is •3·36 times $\left[\frac{750{,}000 + 90{,}000}{250{,}000}\right]$ / •3·28 times $\left[\frac{750{,}000 + 70{,}000}{250{,}000}\right]$ / •3·0 times $\left[\frac{750{,}000}{250{,}000}\right]$ (1)
- debenture holders should feel secure because of the excess in value of the fixedassets over the loan (1)
- debenture holders would be dissatisfied that investments which cost €90,000 nowonly 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.

(b) (cont'd.)

❸ Prospects

(v) Sector **(5)**

– the company operates in the renewable energy sector - growing market withemphasis 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 / installationgrants for solar heating panels / tax relief on home renovations (1)
– prospects are also good in the long term (1), particularly due to anticipated oilshortages 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.

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 liquidassets, *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'ssolvency

** 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.

QUESTION 5

100 Marks

Interpretation of Accounts

Dublin Examination Board

2014 – Henry PLC

The following figures have been taken from the final accounts of Henry plc, a company involved in the clothing industry, for the year ended 31/12/2013. The company has an authorised capital of €1,300,000made up of 900,000 ordinary shares at €1 each and 400,000 6% preference shares at €1 each. The company has already issued 500,000 ordinary shares and 350,000 of the 6% preference shares.

Trading and Profit and Loss Account for year ended 31/12/2013

	€	€
Sales		1,070,000
Opening stock	41,000	
Closing stock	47,000	
Cost of goods sold		(740,000)
Operating expenses for year		(270,000)
Interest for year		(20,000)
Net Profit for year		40,000
Dividends paid		(35,000)
Retained Profit		5,000
Profit and Loss Balance 01/01/2013		40,000
Profit and Loss Balance 31/12/2013		45,000

Ratios and information for year ended 31/12/2012

Earnings per Ordinary Share	10.5c
Dividend per Ordinary Share	4.2c
Interest Cover	4.8 times
Quick Ratio	1.1 to 1
Return on Capital Employed	9.4%
Market Value of one Ordinary Share	€1.02
Gearing	42%
Dividend Cover	2.5 times
Dividend Yield	4.1%

Balance Sheet as at 31/12/2013

	€	€	€
Fixed Assets			
Intangible			150,000
Tangible			820,000
Investments (market value 31/12/2013 – €70,000)			85,000
			1,055,000
Current Assets (including Stock €47,000 and Debtors €55,000)		135,000	
Current Liabilities			
Trade Creditors	70,000		
Bank	25,000	(95,000)	40,000
			1,095,000
Financed by			
8% Debentures (2019 secured)			200,000
Capital and Reserves			
Ordinary Shares @ €1 each		500,000	
6% Preference Shares @ €1 each		350,000	
Profit and Loss Balance		45,000	895,000
			1,095,000

Market value of one ordinary share €0.85 on **31/12/2013**.

(a) **You are required to calculate the following for 2013:** (where appropriate calculations should be made to **two** decimal places.)

(i) The Earnings per Ordinary Share
(ii) The Cash Purchases if the average period of credit received from trade creditors is 1.5 months
(iii) The Dividend Yield
(iv) The Ordinary Dividend Cover
(v) How long it would take one ordinary share to recover its value at present pay-out rate? (50)

(b) Indicate whether 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)

(c) Explain the limitations of ratio analysis. (10)

ANSWER

(a) Ratios

(i) The Earnings per Ordinary Share (10)

$$= \frac{\text{Net Profit} - \text{Preference Dividend}}{\text{Number of Ordinary Shares Issued}} = \frac{40{,}000\ \mathbf{(2)} - 21{,}000\ \mathbf{(3)}}{500{,}000\ \mathbf{(3)}}$$

= 3.8 cent** **(2)**

(ii) The Cash Purchases if the average period of credit received from trade creditors is 1.5 months (12)

Average period of credit received from creditors

$$= \frac{\text{Creditors}}{\text{Credit Purchases}} \times \frac{12}{1} = 1.5$$

$\Rightarrow$ Credit Purchases

$$= \frac{\text{Creditors}}{1.5} \times \frac{12}{1} = \frac{70{,}000\ \mathbf{(1)} \times 12\ \mathbf{(1)}}{1.5\ \mathbf{(1)}}$$

= €560,000 **(1)**

Total Purchases

= Cost of Sales – Opening Stock + Closing Stock = 740,000 **(1)** – 41,000 **(1)** + 47,000 **(1)**

= €746,000 **(1)**

$\Rightarrow$ Cash Purchases

= Total Purchases – Credit Purchases = 746,000* **(1)** – 560,000* **(1)**

= €186,000** **(2)**

(iii) The Dividend Yield (12)

Dividend per Share

$$= \frac{\text{Total Ordinary Dividend}}{\text{Number of Ordinary Shares Issued}} = \frac{14{,}000\ \mathbf{(2)}}{500{,}000\ \mathbf{(2)}}$$

= 2.8 cent** **(2)**

$\Rightarrow$ Dividend Yield

$$= \frac{\text{Dividend per Share}}{\text{Market Price per Share}} \times \frac{100}{1} = \frac{2.8^*\ \mathbf{(1)} \times 100\ \mathbf{(1)}}{85\ \mathbf{(2)}}$$

= 3.29%** **(2)**

(iv) The Ordinary Dividend Cover (8)

$$= \frac{\text{Net Profit} - \text{Preference Dividend}}{\text{Ordinary Dividend}} \times \frac{100}{1} = \frac{40{,}000\ \mathbf{(2)} - 21{,}000\ \mathbf{(2)}}{14{,}000\ \mathbf{(2)}}$$

= 1.36 times* **(2)**

(v) How long it would take one ordinary share to recover its value at present pay-out rate? (8)

$$= \frac{\text{Market Price}}{\text{Dividend per Share}} = \frac{85\ \mathbf{(3)}}{2.8^*\ \mathbf{(3)}}$$

= 30.36 years** **(2)**

* Allow full marks for student's own figure if consistent with previous work.
** Full marks awarded for correct answer even if no workings or wrong workings are shown.
** Penalise 1m if ratios not given to 2 decimal places where appropriate.
** Penalise 1m if appropriate units (cent, times, %, years) omitted from final answers.
** Allow 3m for correct formula if no other work shown.

(b) Indicate whether 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 dissatisfied with the following:

❶ Performance

(i) Profitability **(7)**

- Return on Capital Employed in 2013 is *5.48% (1)
- in 2012, Return on Capital Employed was 9.4% (1)
- disimproved by 3.92% and this indicates an unhealthy trend (1)
- if this trend continues, there is a risk of having to sell some of the fixed assetsin order to repay the debenture holders (1)
- the return is only slightly ahead of the return from risk-free investments of 3-4% (1)
- the return is below the rate being paid on debentures which are secure (1)
- the company is making less efficient use of resources in 2013 (1)

* Accept student's own figure.
** Figures in brackets show breakdown of marks if answer incomplete.

(ii) Dividend Policy **(7)**

- dividend cover in 2013 is *1.36 times (1)
- in 2012, dividend cover was *2.5 times (1)
- dividend cover has worsened significantly (1)
- based on this year's profit of €40,000, dividends of €35,000 are excessive (1)
- percentage of profits paid out in 2013 is *73.68% which is much higher thanthe figure of 40% in 2012 (1)
- more of the profits should be retained (1) for the repayment of debentures (1)

* Accept student's own figure.
** Figures in brackets show breakdown of marks if answer incomplete.

❷ State of Affairs

(iii) Liquidity **(7)**

- quick ratio in 2013 is *0.93:1 (1)
- in 2012, the quick ratio was 1.1:1 (1)
- quick ratio has worsened in the last year (1)
- company has a slight liquidity problem as it has fallen below the ideal of 1:1 (1)
- the company now has only 93c available to pay every €1 owed in the short-term (1)
- if this trend continues, the company may have difficulty paying its debts, includingfuture interest (1), and funds will not be available for the purpose of repaying the debenture loan (1)

* Accept student's own figure.
** Figures in brackets show breakdown of marks if answer incomplete.

(iv) Gearing **(7)**

- the company is highly geared (1)
- gearing ratio in 2013 is *50.23% (1)
- gearing has slipped from 42% in 2012 (1)
- interest cover has worsened from 4.8 times in 2012 (1) to 3 times in 2013 (1)
- the company is now more dependent on outside borrowings/debt capital (1) and, if this trend continues, it could make interest payments more difficult (1)

* Accept student's own figure.
** Figures in brackets show breakdown of marks if answer incomplete.

(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 thereis sufficient security for the loan (1)
- fixed assets of €1,055,000, of which intangible assets are €150,000, leavingnet fixed assets excluding intangibles of €905,000 (1)
- debenture holders should feel secure because of the excess in value of the fixedassets over the loan (1)
- cover over value of loan, $\frac{905,000}{200,000}$ = *4.53 / $\frac{890,000}{}$ = *4.45 / $\frac{820,000}{}$ = *4.1 (1)
- would be prudent to ascertain the real value of fixed assets as there are no write-offslike depreciation in the accounts (1)
- investments which cost €85,000 now have a current value of €70,000, which isdisappointing (1)

* Accept student's own figure.
** Figures in brackets show breakdown of marks if answer incomplete.

❸ Prospects

(vi) Sector **(5)**

- the company operates in the clothing industry (1)
- this industry has declined significantly with the slow-down in economic growth (1)
- consumers nowadays have less disposable income (1)
- major risks include over-production and low-cost competition (1)
- prospects are not encouraging in the medium term (1)

** Figures in brackets show breakdown of marks if answer incomplete.

(c) Explain the limitations of ratio analysis. (10)

Any 3: **(4 + 3 + 3)**

- it analyses past figures only (2) which are quickly out-of-date (2)
- it does not show seasonal (2) fluctuations (1) //
- firms use different accounting bases (2) and therefore company comparisons may not be accurate (1) //
- financial statements give a limited picture of a business (2), monopoly position, economic climate, staffmorale or management/staff relationships are not measured (1) // *etc*.

** Accept other appropriate answers.
** Figures in brackets show breakdown of marks if answer incomplete.

QUESTION 5

100 Marks

Interpretation of Accounts

Dublin Examination Board

2013 – Fogarty PLC

QUESTION

The following figures have been taken from the final accounts of Fogarty plc, a manufacturer in the dairy industry, for the year ended 31/12/2012. The company has an authorised capital of €900,000 made up of 650,000 ordinary shares at €1 each and 250,000 6% preference shares at €1 each. The firmhas already issued 400,000 ordinary shares and 200,000 of the 6% preference shares.

Trading and Profit and Loss account foryear ended 31/12/2012

	€
Sales	820,000
Cost of goods sold	(451,000)
Operating expenses for year	(239,000)
Interest for year	(18,000)
Net Profit for year	112,000
Dividends paid	(43,500)
Retained Profit	68,500
Profit and Loss Balance 01/01/2012	22,500
Profit and Loss Balance 31/12/2012	91,000

Ratios and information for year ended 31/12/2011

Earnings per Ordinary Share	17.8c
Dividend per Ordinary Share	6.5c
Interest Cover	5.8 times
Quick Ratio	0.95 to 1
Return on Capital Employed	11.9%
Market value of one ordinary share	€1.75
Gearing	49%
Dividend Cover	2.7 times

Balance Sheet as at 31/12/2012

	€	€
Fixed Assets	760,000	
Investments (market value €120,000)	110,000	870,000
Current Assets (Closing Stock €38,000 and Debtors €35,000)	86,000	
Current Liabilities		
Trade Creditors	(39,000)	
Bank	(26,000)	21,000
		891,000
Financed by		
9% Debentures (2017/2018)		200,000
Capital and Reserves		
Ordinary Shares @ €1 each	400,000	
6% Preference Shares @ €1 each	200,000	
Profit and Loss Balance	91,000	691,000
		891,000

Market Value of one Ordinary Share €1.90.

You are required to calculate the following for 2012:

(a) (i) The Opening Stock if the rate of stock turnover is 11 based on average stock.
(ii) Return on Capital Employed
(iii) The Earnings per Ordinary Share.
(iv) The Dividend Yield.
(v) How long it would take one ordinary share to recover its value at present pay out rate. (45)

(b) Indicate whether 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)

(c) Having assessed Fogarty plc, what actions would you advise the company to take? (15)

ANSWER

(i) The Opening Stock if the rate of stock turnover is 11 times

Rate of Stock Turnover

$$= \frac{\text{Cost of Sales}}{\text{Average Stock}} = 11 \text{ times } \mathbf{(2)}$$

$\Rightarrow$ Average Stock $= \dfrac{451{,}000 \ \mathbf{(2)}}{11}$

$= 41{,}000$ **(1)**

$\Rightarrow$ Opening Stock $= (41{,}000 \times 2)$ **(2)** $- 38{,}000$ **(2)**

$=$ *€44,000 **(1)**

* Accept student's own figures if consistent with previous work.

(ii) Return on Capital Employed (8)

$$= \frac{\text{Net Profit + Interest}}{\text{Capital Employed}} \times \frac{100}{1} = \frac{112{,}000\,\mathbf{(1)} + 18{,}000\,\mathbf{(2)}}{891{,}000\,\mathbf{(2)}} \times \frac{100}{1}\,\mathbf{(1)}$$

$=$ *14.59% **(2)**

* Accept student's own figures if consistent with previous work.

(iii) The Earnings per Ordinary Share (8)

$$= \frac{\text{Net Profit} - \text{Preference Dividend}}{\text{Number of Ordinary Shares Issued}} = \frac{112{,}000\mathbf{(2)} - 12{,}000\mathbf{(2)}}{400{,}000\mathbf{(2)}}$$

$=$ *25 cent **(2)**

* Accept student's own figures if consistent with previous work.

(iv) The Dividend Yield (10)

Dividend per Share

$$= \frac{\text{Total Ordinary Dividends}}{\text{Number of Ordinary Shares Issued}} = \frac{31{,}500\ \mathbf{(3)}}{400{,}000\ \mathbf{(1)}}$$

$=$ 7.88 cent

$\Rightarrow$ Dividend Yield

$$= \frac{\text{Dividend per Share}}{\text{Market Price per Share}} \times \frac{100}{1} = \frac{7.88\ \mathbf{(3)}}{190} \times \frac{100}{1}\ \mathbf{(1)}$$

$=$ *4.15% **(2)**

* Accept student's own figures if consistent with previous work.

(v) How long it would take one ordinary share to recover its value at present pay out rate.

(9)Length of time

$$= \frac{\text{Market Price}}{\text{Dividend per Share}} = \frac{190\ \mathbf{(3)}}{{}^{*}7.88\ \mathbf{(4)}}$$

$=$ *24.11 years **(2)**

* Accept student's own figures if consistent with previous work.

** Full marks awarded for correct answer even if no workings or wrong workings are shown.
** Penalise 1 mark if ratios not given to 2 decimal places where appropriate.
** Penalise 1 mark if appropriate units (cent, %, years) omitted from final answers.
** Allow 3 marks for correct formula if no other work shown.

(b) Indicate whether 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)

(i) Profitability **(7)**
- last year the return on capital employed was 11.9% (1)
- this year it is *14.59% (1), which is better (1)
- the company is profitable (1)
- 14.59% is about 4 times risk-free rates of 3-4% (1)
- it is also above the debenture interest rate of 9% (1)
- there is no risk of having to sell fixed assets to repay debentures (1)

* Accept own figure.

(ii) Dividend Policy **(7)**
- the dividend per share has improved from 6.5c to *7.88c (1)
- last year the dividend cover was 2.7 times (1)
- this year it is 3.17 times (1), which is better (1)
- 31.5% (1) of profits are paid out, which is acceptable (1)
- enough profits are being retained to repay debentures (1)

* Accept own figure.

(iii) Liquidity **(7)**
- last year the quick ratio was 0.95:1 (1)
- this year it is 0.74:1 (1), which is worse (1)
- now only 74c is available to pay each €1 owed (1) in the short term (1)
- the company has a serious liquidity problem (1)
- it has a difficulty paying debts including future interest (1)

(iv) Gearing **(7)**
- last year the gearing ratio was 49% (1)
- this year it is 44.89% (1), which is better (1)
- the company is lowly geared (1) and is now less dependent on debt capital (1)
- interest cover has improved from 5.8 times last year to 7.22 times this year (1)
- it is now easier to make interest payments (1)

(v) Security **(7)**
- the debentures are secured on fixed assets of €870,000 (1)
- debenture holders would feel secure (2) as this is over 4 times the loan €200,000 (2)
- the real value of fixed assets is uncertain since there are no write-offs (1)
- investments, cost €110,000, now have a market value of €120,000, which is good (1)

(vi) Sector **(5)**
- long-term prospects in the dairy industry (1) are not encouraging (1)
- the economic recession (1) is having a negative effect on the industry (1)
- the industry is also at risk from over-production and low-cost competition (1)

(c) Having assessed Fogarty plc, what actions would you advise the company to take? (15

)<u>Assessment</u> **(3 × 1)**
- the acid test ratio has decreased from 0.95:1 to 0.74:1
- the company has a liquidity problem
- Fogarty plc should try to raise cash and improve liquidity

<u>Actions</u>

Any 4: **(4 × 3)**
- sell investments rather than issuing debentures //
- pay out lower or no dividends //
- issue the remaining shares //
- Diversify into other areas // collect debts from debtors more quickl