## Aufgabe QR-14.1: Debentures (Anleihen)

CLAREMONT Ltd. is in the computer business and offers consultancy. It is based on 100,000 ordinary shares 1.00 EUR each. Total of reserves is 1,400,000.00 EUR as at 31.12.20X5 and 20X6. As the business grew in past years the company decided to issue debentures for the financing of new branches in foreign countries. They issued 1,000 redeemable debentures at an issue price 1,000.00 EUR each on 1.01.20X3. The market interest rate for similar bonds is 8.0 %/a. CLAREMONT plans to redeem the bonds on 31.12.20X7 par value. The rate of interest for bonds in 20X7 is 6.5 %/a otherwise it remained unchanged. The company learns about the new rate of interest in 20X6.

Required: (1) Determine the value of one debenture as at 31.12.20X6 for the bond holder? (2) Make all bookkeeping entries for the debentures starting by 1.01.20X3 ending on 31.12.20X6. (3) Display the credit side of CLAREMONT's statement of financial position as at 31.12.20X6 and 20X5 (=comparative information).

## Lösung (Solution):

(1) The amount of the debenture is the total of interest payments and the settlement value. It is  $80 \cdot (1 + 6.5\%) - 1 / (6.5\% \cdot (1 + 6.5\%)) + 1,000 / (1 + 6.5\%) = 1,014.08$  EUR.

(2) The bookkeeping entries in 20X3 are the issue of debentures, the discounting and the interest pay:(a) Issue of debenture (simplified – no applicants account used here):

DR	Bank		•••••	1,000,000.00	EUR
CR	Debentures	(IbL)		1,000,000.00	EUR

(b) At the time of issue the interest rate for discounting is 8 %. The debentures are discounted at the end of the year for preparing the financial statements. At that stage the present value is to be calculated for the years 20X4, 20X5, 20X6, and 20X7. Accordingly the present value is 1,000,000 /  $(1 + 8\%)^4 = 735,029.85$  EUR. The amount to reduce the debentures is 1,000,000 – 735,029.85 = 264,970.15 EUR.

DR Deber	ntures	(IbL)	 • • • • •	••••	264,970.15	EUR
CR R/E .	• • • • • •	• • • • • •	 • • • • •	••••	264,970.15	EUR

(c) The interest payment (coupon) does not affect the debentures. It is expensed for 20X3 immediately.

DR	Interest	(coupon)	 80,000.00	EUR
CR	Bank		 80,000.00	EUR

(d) As at the end of 20X4 the amount for debentures is to be upgraded by the factor (1 + 8 %). The amount for the debentures is 735,029.85  $\cdot$  1.08 = **793,832.24 EUR**. The difference is 793,832.24 - 735,029.85 = **58,802.39 EUR**.

DR R/E	58,802.39 EUR
CR Debentures (IbL)	58,802.39 EUR
(e) Interest payment:	
DR Interest (coupon)	80,000.00 EUR
CR Bank	80,000.00 EUR

(f) As at the end of 20X5 the amount for debentures is to be upgraded by the factor (1 + 8 %). The amount for the debentures is 793,832.24  $\cdot$  1.08 = 857,338.82 EUR. The difference is 857,338.82 - 793,832.24 = 63,506.58 EUR.

DR	R/E	• • • • •	 63,506.58	EUR
CR	Debentures	(IbL)	 63,506.58	EUR

(g) Interest payment:

DR	Interest	(coupon)	80,000.00	EUR
CR	Bank		80,000.00	EUR

(h) As at the end of 20X6 the amount for debentures is to be upgraded by the factor  $(1 + 8 \%)^2$ . The discount rate is split up to the normal upgrade and the second one for the amount to be paid off for the redemption. The amount for the debentures is 1,000,000.00 EUR accordingly. The difference is 1,000,000.00 – 857,338.82 = **142,661.18 EUR**. The change in the rate of interest is not relevant for bookkeeping entries because the amount was discounted by 8% in 20X3. CLAREMONT only gets notice of the changes in the rate of interest in 20X7.

DR R/E	142,661.18	EUR
CR Debentures (IbL)	142,661.18	EUR
(i) Interest payment:		
DR Interest (coupon)	80,000.00	EUR
CR Bank	80,000.00	EUR
(j) Along IAS 1 the short term liabilities are to be shown as A/P.		
DR Debentures (IbL)	1,000,000.00	EUR
CR A/P	1,000,000.00	EUR

In order to provide an overview about the bookkeeping entries observe the accounts in exhibit 2:



Exhibit 2: Accounts

(3) The credit side of the statement of financial position for CLAREMONT Ltd. looks like displayed in exhibit 3:

## Claremont Ltd's STATEMENT of FINANCIAL POSITION as at 31.12.20X6

	20X6	20X5
	[EUR]	[EUR]
[]		
Liabilities		
[] Interest bearing liabilities		857.338,82
Trade and other payables	1.000.000,00	
Provisions		
Liabilities and assets [] IAS 12		
Deferred tax liabilities [] IAS 12		
Deferred income		
Total of liabilities	1.000.000,00	857.338,82
Capital		
Issued capital	100.000,00	100.000,00
Other reserves	1.400.000,00	1.400.000,00
Retained earnings	0,00	142.661,18
Total of shareholder's equity	1.500.000,00	1.642.661,18
Total equity and liabilities	2.500.000,00	2.500.000,00

Exhibit 3: Statement of financial position (claims side)