

# Problem 7

Danish Bakery issued \$1,000,000, face amount, of 6% bonds on January 1, 20X3. The bonds are 10-year bonds, and Interest is payable every 6 months. At the time of issue, the market rate of interest was 8%, so the bonds were issued at a discount.

- a) Prepare calculations showing that issue price was approximately \$4,786,725.
- b) Use the effective-interest method of amortization, and prepare the journal entries that Danish Bakery would record on January 1, 20X3, June 30, 20X3, and December 31, 20X3.
- c) Show how the bonds would appear on Danish Bakery’s December 31, 20X3 balance sheet.

## Worksheet 7

a)

b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
1-Jan			
30-Jun			
31-Dec			

- c)  
 Bonds Payable  
 Plus: Premium on bonds payable

Solution 7

a)

Periodic interest payments (\$1,000,000 X 3%)	\$	30,000	
Present value factor (20 period annuity, 4%)	X	<u>14,8775</u>	\$ 446,324
Maturity value	\$	1,000,000	
Present value factor (20 periods, 4%)	X	<u>0.4564</u>	\$ 456,390
Issue price of bond			<u>\$ 902,714</u>

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b)

GENERAL JOURNAL			
Date	Accounts	Debit	Credit
1-Jan	Cash	902,714	
	Discount on Bonds Payable	97,286	
	Bonds Payable		1,000,000
	<i>To record the issuance of \$1,000,000, 5%, 10-year bonds at \$902,714</i>		
30-Jun	Interest Expense	36,109	
	Discount on Bonds Payable		6,109
	Cash		30,000
	<i>To record payment of interest (\$1,000,000 X .03 = \$30,000; \$902,714 X .04 = \$36,109)</i>		
31-Dec	Interest Expense	36,353	
	Discount on Bonds Payable		6,353
	Cash		30,000
	<i>To record payment of interest (\$1,000,000 X .03 = \$30,000; (\$902,714 + \$6,109) X .04 = \$36,353)</i>		

c)

Bonds Payable	\$	1,000,000	
Plus: Premium on bonds payable		<u>84,824</u>	\$ <u>915,176</u>