Practice Set   BONDS PAYABLE

I. ISSUING BONDS AT PAR

Business continued good, but cash was short, and paying off the $50,000 note to Bank B was proving difficult. The shortage was solved by issuing at Par on Dec. 31, 2002, Bonds valued at $80,000 with interest at 14% paid semiannually with a maturity of 4 years. Make the first year's entries and the entry to pay off the bonds.

		DR.	CR.
Dec. 31	Cash	80,000	
	Bonds Payable		80,000
June 30	Interest Expense ($80,000)(.14)(1/2)	5,600	
	Cash		5,600
Dec. 31	Interest Expense	5,600	
	Cash		5,600
Dec. 31	Bonds Payable	80,000	
	Cash		80,000

II. ISSUING BONDS AT A DISCOUNT

During 2006, business continued good, but cash was again in short supply, and $80,000 in bonds were soon to be paid. It was decided to raise $100,000 in cash with a 3-year Bond issue. Market conditions and the financial strength of the company indicated 10% interest paid semiannually would sell the entire issue. Unfortunately, market conditions worsened, business slowed, and the Bonds sold on Dec. 31, to yield 12% semiannually. The amount received was the present value of 6 interest payments of $5,000 ($100,000)(.05), plus the present value of the $100,000 to be paid in 3 years. Interest was the market rate of 12% compounded and paid semiannually. Make the Journal Entry to record the sale of the bonds and the first interest payment using a Straight Line amortization and an Effective Interest amortization.

Value of Interest	Value of Bond
P = A(PVMA)	P = F(PVM)
= $5,000(4.917)	= $100,000(.7049)
= $24,585	= $70,490

Amount Received = $24,585 + $70,490 = $95,075.

		DR.	CR.
Dec. 31	Cash	95,075	
	Discount on Notes Payable	4,925	
	Bonds Payable		100,000

AMORTIZING BOND DISCOUNTS AND PAYING INTEREST

STRAIGHT LINE METHOD

Amortization Per Period = 4,925/6	= $820.83

		DR.	CR.
June 30	Bond Interest Expense	5,820.83	
	Discount on Bonds Payable		820.83
	Cash		5,000.00

EFFECTIVE INTEREST METHOD (Round)

Period	(a) Carrying Amount BOP	(b) Interest Expense Recorded (.06)(a)	(c) Interest Paid	(d) Discount Amortized (b-c)	(e) Unamortized Discount (e-d)	Carrying Amount EOP (a+d)
0					$ 4,925	
1	$95,075	$ 5,705	$ 5,000	$ 705	4,220	$ 95,780
2	95,780	5,747	5,000	747	3,473	96,527
3	96,527	5,792	5,000	792	2,681	97,319
4	97,319	5,839	5,000	839	1,842	98,158
5	98,158	5,889	5,000	889	953	99,047
6	99,047	5,953	5,000	953	0	100,000

		DR.	CR.
June 30	Bond Interest Expense	5,705	
	Discount on Bonds Payable		705
	Cash		5,000

Note: Period 5's Unamortized Discount balance determines final adjustment period 6.

III. ISSUING BONDS AT A PREMIUM

Had The Computer Warehouse been more fortunate, interest rates would have fallen, and the bonds would have sold at a premium to yield 8% semiannually. Make the Journal Entry to record the sale of Bonds sold to yield 8% and the first interest payment using both a Straight Line amortization and an Effective Interest amortization.

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              Value of Interest            Value of Principal
        P = A(PVMA)                    P = F(PVM)
        P = $5,000(5.242)              P = $100,000(.7903)
        P = $26,210                    P = $79,030

Amount received equals $26,210 + $79,030 = $105,240.
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		DR.	CR.
Dec. 31	Cash	105,240	
	Bonds Payable		100,000
	Premium on Bonds Payable		5,240

AMORTIZING BOND PREMIUMS AND PAYING INTEREST

STRAIGHT LINE METHOD

Amortization Per Period = 5,240/6   = $873.33

		DR.	CR.
June 30	Premium on Bonds Payable	873.33	
	Interest Expense	4,126.67	
	Cash		5,000

EFFECTIVE INTEREST METHOD (Round)

Period	(a) Carrying Amount BOP	(b) Interest Expense Recorded (.04)(a)	(c) Interest Paid	(d) Premium Amortized (c-b)	(e) Unamortized Premium (e-d)	Carrying Amount EOP (a-d)
0					$5,240	
1	$105,240	$ 4,210	$5,000	$ 790	4,450	$104,450
2	104,450	4,178	5,000	822	3,628	103,628
3	103,628	4,145	5,000	855	2,773	102,773
4	102,773	4,111	5,000	889	1,884	101,884
5	101,884	4,075	5,000	925	959	100,959
6	100,959	4,041	5,000	959	0	100,000

		DR.	CR.
June 30	Interest Expense	4,210	
	Premium on Bonds Payable	790	
	Cash		5,000

Note: Period 5's Unamortized Premium balance determines final adjustment period 6.

IV. BOND SINKING FUND

On Dec. 31, 2006, it was decided to start a sinking fund to pay off the discounted bonds issued that day. The first of 6 semiannual payments into the fund, which was expected to earn 12% semiannually, was made in 6 months. Calculate the equal payments. Make the entry to start the fund, the entry to record 6 month's interest, and the entry to pay the bondholders $100,000 three years hence.

F = A(FVMA)

100,000 = A(6.975)

A = $14,336.92

		DR.	CR.
June 30	Bond Sinking Fund	14,336.92	
	Cash		14,336.92
Dec. 31	Bond Sinking Fund (14,336.92)(.06)	860.22	
	Sinking Fund Earnings		860.22
Dec. 31	Bonds Payable	100,000.00	
	Bond Sinking Fund		100,000.00

Hint: Six months interest equaled $860.22.