

# Mid Term Exam Intermediate Financial Accounting II Fall 2007 ADM3340

## (SOLUTIONS)

### Instructions:

- Please check one of the following:

Section	Professor	Check one ?
A:	Conheady	<input type="checkbox"/>
B:	Collier	<input type="checkbox"/>

- This examination comprises 3 questions over 14 pages. Answer all questions in this booklet. Booklet is **not** to be removed from the examination room. You may separate the pages but ensure that you put them back together and staple before handing in.
- Limit your answer to the space provided. Blank sheets for rough work and supporting calculations are given at the end of each question.
- This exam is out of 80 marks and is 2½ hours long. You should budget approximately 1.8 minutes per mark.
- Please do **not** ask the invigilator or the professor any questions, as they will **not** be answered. State reasonable assumptions, if you feel they are necessary.
- Language dictionaries are allowed.
- You **must** sign the Statement of Academic integrity on page 2 of this exam.

Question		Marks
1	Shareholders Equity	/25
2	Liabilities	/30
3	Investments	/25
<b>TOTAL</b>		<b>/80</b>

**Statement of Academic Integrity**

The School of Management does not condone academic fraud, an act by a student that may result in a false academic evaluation of that student or of another student. Without limiting the generality of this definition, academic fraud occurs when a student commits any of the following offences: plagiarism or cheating of any kind, use of books, notes, mathematical tables, dictionaries or other study aid unless an explicit written note to the contrary appears on the exam, to have in his/her possession cameras, radios (radios with head sets), tape recorders, pagers, cell phones, or any other communication device which has not been previously authorized in writing.

**Statement to be signed by the student:**

I have read the text on academic integrity and I pledge not to have committed or attempted to commit academic fraud in this examination.

Signed:\_\_\_\_\_

Note: an examination copy or booklet without that signed statement will not be graded and will receive a final exam grade of zero.

**Question No. 1 (25 marks)**

On January 1, 2006, Hopper Corporation was incorporated. Details of the share structure of the corporation are shown below:

- ? Series A Preferred Shares, no par, \$0.80, cumulative, each share is convertible into 2.5 common shares; 10,000 shares authorized.
- ? Series B Preferred Shares, no par, \$1.00, cumulative, participating dividends with common shares to an additional \$0.20 after the common shares have received a \$0.50 matching dividend; 25,000 shares authorized.
- ? Common Shares, unlimited number authorized.

Hopper Corporation has a December 31 year-end.

**Required:**

Record **dated** journal entries, where necessary, for each event described below in the space provided, showing all necessary details of any calculations. Narrative explanations are **not** needed.

- Jan 1 Issued 5,000 Preferred B shares in exchange for professional services received from the lawyers involved in getting the company incorporated. If Hopper had paid cash for the services, the amount of the payment would have been \$45,000. Hopper chose to capitalize the costs.

Answer:

Organization Costs (deferred charge).....	45,000	
Preferred B Shares .....		45,000

- Jan 1 The first shareholders invested cash into the company to start operations. The four managers invested in common shares while their partners invested in the two classes of preferred shares. In all, 5,000 of each class of shares were issued for cash, the Preferred A shares at a price of \$10.00 per share, the Preferred B shares at \$15.00 per share, and the common shares at \$9.00 per share.

Answer:

Cash.....	170,000	
Preferred A Shares .....		50,000
Preferred B Shares .....		75,000
Common Shares .....		45,000

- Mar 1 Accepted subscriptions for 40,000 common shares at a price of \$11.00 per share. A 25% down payment on the subscribed shares was received on the same date.

Answer:

Cash.....	110,000	
Subscriptions Receivable.....	330,000	
Common Shares Subscribed .....		440,000

**Question No. 1 (continued) (25 marks)**

- Mar 15 Land, which had cost \$22,800 three years earlier but with a current market value of \$30,000, was donated to the Hopper Corporation by the local municipal government as an incentive to locate in the area and generate jobs for the community.

Answer:

<i>Land .....</i>	<i>30,000</i>	
<i>Contributed Capital - Donations .....</i>		<i>30,000</i>

June 30 Collected the balance of the subscription receivable and issued the shares.

Answer:

<i>Cash.....</i>	<i>330,000</i>	
<i>Subscriptions Receivable .....</i>		<i>330,000</i>
<i>Common Shares Subscribed.....</i>	<i>440,000</i>	
<i>Common Shares .....</i>		<i>440,000</i>

Aug 1 Purchased and retired 1,000 Preferred B shares at \$13.00 per share

Answer:

<i>Preferred B Shares .....</i>	<i>12,000</i>	
<i>Retained Earnings .....</i>	<i>1,000</i>	
<i>Cash .....</i>		<i>13,000</i>

Sept 1 2,000 Preferred A shares were converted into common shares at book value.

Answer:

<i>Preferred A Shares .....</i>	<i>20,000</i>	
<i>Common Shares .....</i>		<i>20,000</i>

Nov 12 Dividends totaling \$50,000 were declared to shareholders of record on November 18, 2006, payable November 30, 2006.

Answer:

<i>Dividends Declared (Retained Earnings).....</i>	<i>2,400</i>	
<i>Dividends Declared (Retained Earnings).....</i>	<i>10,800</i>	
<i>Dividends Declared (Retained Earnings).....</i>	<i>36,800</i>	
<i>Dividends Payable – Preferred A Shares .....</i>		<i>2,400</i>
<i>Dividends Payable – Preferred B Shares .....</i>		<i>10,800</i>
<i>Dividends Payable – Common Shares .....</i>		<i>36,800</i>

Nov 30 All declared dividends were paid.

Answer:

<i>Dividends Payable – Preferred A Shares .....</i>	<i>2,400</i>	
<i>Dividends Payable – Preferred B Shares.....</i>	<i>10,800</i>	
<i>Dividends Payable – Common Shares .....</i>	<i>36,800</i>	
<i>Cash .....</i>		<i>50,000</i>

Question No. 1 (continued) (25 marks)

Dec 1 Declared a 2:1 stock split on the common shares effective December 1, 2006 when the common shares' market value was \$18.00

Answer:

Memorandum entry only.

Supporting Calculations for Shareholders Equity Accounts

Preferred B Shares	
	45,000
	<u>75,000</u>
	120,000
<u>12,000</u>	<u>108,000</u>

The number of Preferred B shares is  $5,000 + 5,000 - 1,000 = 9,000$ . Therefore, the average issuance price is  $\$108,000 / 9,000 = \$12.00$  per share.

Preferred A Shares	
	50,000
<u>20,000</u>	<u>30,000</u>

The number of Preferred A shares is  $5,000 - 2,000 = 3,000$ . Therefore, the average issuance price is  $\$30,000 / 3,000 = \$10.00$  per share.

Common Shares	
	45,000
	440,000
	<u>20,000</u>
	505,000

The number of Common shares is  $(5,000 + 40,000 + 5,000) \times 2$  (stock split) = 100,000. Therefore, the average issuance price is  $\$505,000 / 100,000 = \$10.10$  per share.

Dividend Allocation Calculations

	Preferred A	Preferred B	Common	Total
Number of shares – Current year (3,000 x \$0.80)	\$2,400			\$ 2,400
Number of Shares (9,000 x \$1.00)		\$9,000		\$ 9,000
Matching – Common @ \$0.50 (50,000 x \$0.50)			\$25,000	\$25,000
Participating – Preferred B Shares @ \$0.20 (9,000 x \$0.20)		\$1,800		\$ 1,800
Remaining to Common Shares			\$11,800	\$11,800
	\$2,400	\$10,800	\$36,800	\$50,000

Question No. 2 (30 marks)

On December 1, 2007 ColCon Company issues \$2,000,000 face value bonds. The bond date is June 1, 2007 and the bonds carry a coupon rate of 10% per year, payable semi-annually on May 31 and November 30. The bonds' maturity date is May 31, 2017 (these are 10 year bonds). The bonds provide an annual yield of 8%. Bond issuance costs amounted to \$84,000 and are amortized using the straight-line method.

The company uses the straight-line method to amortize any bond premium or discount. On March 31, 2008 ColCon retires 40% of the bonds at 103% excluding accrued interest. ColCon’s accounting year-end is January 31.

**Required:**  
Provide all necessary journal entries pertaining to these bonds and issuance costs in the period December 1, 2007 to January 31, 2009. Each entry must be dated and presented in chronological (date) order.

Answer:

December 01, 2007	Date of issuance	Dr	Cr
Bond issue costs		84000	
Cash		2178674	
	Bonds payable		2000000
	Bond premium		262674
Face value	\$2,000,000		
Stated interest rate	10.00% per year = 5.00% semi-annually.		
Effective interest rate (Yield)	4.00% semi-annually.		
Issue date	December 1, 2007		
Maturity date	May 31, 2017, 6 months after November 30, 2016, the closest preceding interest payment date.		

Bond proceeds (see detailed calculation below)	2262674	
Face value of bonds	2000000	
Bond premium	262674	= \$2,262,674 - \$2,000,000
Bond issue costs	-84000	
Total proceeds on issuance	2178674	= \$2,262,674 - \$84,000

The closest preceding interest payment date to the issuance date is	November 30, 2007	
Issuance date	December 1, 2007	
The first interest payment date after the issuance date is	May 31, 2008	(6 months after December 1, 2007)

If the bonds were issued on:		
November 30, 2007		
There would be 19 semi-annual interest payments (114 months) between November 30, 2007 and the maturity date, May 31, 2017		
Present value of the bond's 19.00 semi-annual interest payments of \$100,000 (= \$2,000,000 x 10.00%/2) at 4.00% (the computer-generated yield - see the IRR worksheet for details) per period: [\$1,313,394 = 13.13394 x \$100,000]	1313394	
Present value of the maturity value of \$2,000,000 at the end of 19.00 periods at 4.00% (the computer-generated yield - see the IRR worksheet for details) per period: [\$949,280 = 0.47464 x \$2,000,000]	949280	
Total	2262674	
	2262674	

January 31, 2008	The first accounting year-end after the issuance date		
		Dr	Cr
Interest expense		28725	= \$33,333 - \$4,608
Bond premium			
		4608	= \$262,674 x 2/114 months
Interest payable			33333 = \$2,000,000 x 2/12 months x 10.00%
To record bond interest expense incurred between December 01, 2007 (the date of issuance) and January 31, 2008. Straight-line method.			
Bond issue expense		1474	
Bond issue costs			1474 = \$84,000 x 2/114 months
To record the amortization of bond issue costs - straight line method.			
There is no journal entry on January 31, 2008 for interest paid because January 31, 2008 is not an interest payment date.			

March 31, 2008	Date of retirement	Dr	Cr
Interest expense		11490	= \$13,333 - \$1,843
Bond premium		1843	= \$262,674 x 40.00% retired x 2/114 months
Interest payable			13333 = \$2,000,000 x 40.00% retired x 2/12 months x 10.00%
<p>To record interest expense incurred on 40.00% of the bonds between January 31, 2008 (the closest preceding accounting year-end date to the retirement date) and March 31, 2008. Straight-line method.</p> <p>[Note: March 31, 2008 is neither an accounting year-end or a bond interest payment anniversary date.]</p>			
Bond issue expense		589	
Bond issue costs			589 = \$84,000 x 40.00% retired x 2/114 months
To record the amortization of bond issue costs - straight line method.			
Interest payable		26667	= \$13,333 (see above journal entry) + \$13,333 (= \$2,000,000 x 40.00% retired x 2/12 months x 10.00% accrued at January 31, 2008)
Bond		800000	= \$2,000,000 x 40.00% retired
Bond premium		101383	= \$262,674 x 40.00% x 110/114 months
Bond issue costs			32421 = \$84,000 x 40.00% x 110/114 months
Cash			= \$824,000 (= \$2,000,000 x 40.00% x 103.00%) + \$13,333 accrued (as appears in the journal entry above) + \$13,333 accrued at January 31, 2008
Gain on bond retirement			44962 = (\$850,667 - \$26,667 + \$32,421) - (\$800,000 + \$101,383)
To record the retirement at 103.00% of 10.00 year 10.00% bonds, issued December 01, 2007, face value \$800,000.			

Note: compound entries, where appropriate, are also acceptable.

May 31, 2008	The first interest payment date after the retirement date			
		Dr	Cr	
Interest expense		34470		
Bond premium		5530		= \$262,674 x (100% - 40.00% retired) x 4/114 months
Interest payable			40000	= \$2,000,000 x (100% - 40.00% retired) x 4/12 months x 10.00%
To record interest expense incurred between January 31, 2008 (the closest preceding accounting year-end date to the retirement date) and May 31, 2008 on the bonds not retired (60.00%). Straight-line method.				
Bond issue expense		1768		
Bond issue costs			1768	= \$84,000 x (100% - 40.00% retired) x 4/114 months
To record the amortization of bond issue costs - straight line method.				
Interest payable		60000		= \$40,000 (as in the journal entry above) + \$20,000 [\$20,000 = \$2,000,000 x (100% - 40.00% retired) x 2/12 months x 10.00% interest accrued at January 31, 2008, the closest preceding accounting year-end date to the retirement date.]
Cash			60000	
To record the bond interest payment.				

November 30, 2008	The second interest payment date after the retirement date			
		Dr	Cr	
Interest expense		51705		= \$60,000 - \$8,295
Bond premium		8295		= \$262,674 x (100% - 40.00% retired) x 6/114 months
Interest payable			60000	= \$2,000,000 x (100% - 40.00% retired) x 6/12 months x 10.00%
To record interest expense incurred on the outstanding (60.00%) bonds between May 31, 2008 (the first interest payment date after the retirement date) and November 30, 2008. Straight-line method.				
Bond issue expense		2653		
Bond issue costs			2653	= \$84,000 x (100% - 40.00% retired) x 6/114 months
To record the amortization of bond issue costs - straight line method.				
Interest payable		60000		
Cash			60000	
To record the bond interest payment				
January 31, 2009	The first accounting year-end after the retirement date			
		Dr	Cr	
Interest expense		17235		= \$20,000 - \$2,765
Bond premium		2765		= \$262,674 x (100% - 40.00% retired) x 2/114 months
Interest payable			20000	= \$2,000,000 x (100% - 40.00% retired) x 2/12 months x 10.00%
To record interest expense incurred on the outstanding (60.00%) bonds between November 30, 2008 (the second interest payment date after the retirement date) and January 31, 2009. Straight-line method.				
Bond issue expense		884		
Bond issue costs			884	= \$84,000 x (100% - 40.00% retired) x 2/114 months
To record the amortization of bond issue costs - straight line method.				
There is no journal entry to record an interest payment because January 31, 2009 is not an interest payment date.				

Note: compound entries, where appropriate, are also acceptable.



### Question No. 3 (25 marks)

Prucha Limited cautiously began an investment program in 2005. Prucha's accounting period ends December 31. The following transactions and events occurred during 2005 and 2006:

- (a) On March 31, 2005, Prucha purchased 400 shares of Staal Company common shares for \$25 per share. Brokerage fees of \$180 were also incurred. The shares are classified as an available for sale investment. Prucha always includes brokerage fees in the cost of any investment purchased and nets proceeds on sale of investments with brokerage fees charged.
- (b) On June 1, 2005, Prucha purchased a \$200,000, 8%, 10-year bond from Oleg Enterprises Ltd. at 100 plus accrued interest. Brokerage fees of \$700 were also incurred. The Oleg bonds pay interest every June 30 and December 31. This bond is also classified as an available for sale investment.
- (c) On June 30, 2005, Prucha received bond interest.
- (d) At December 31, 2005, Prucha received bond interest. On this same date, the market value of Staal shares was \$22 per share and the Oleg bonds were trading at 102.
- (e) On March 31, 2006, Prucha received a dividend of \$3.75 per share on the Staal common shares.
- (f) On April 1, 2006, Prucha sold one-quarter of its investment in Staal common shares for \$28 per share. Fees of \$80 were paid on the transaction.
- (g) On May 1, 2006, Prucha sold all of the Oleg bonds for 103 plus accrued interest.
- (h) On September 30, 2006 Prucha received a dividend of \$3.50 per share on the Staal common shares.
- (i) On December 31, 2006, the market value of the Staal common shares was \$26 per share. Oleg bonds were trading on the market at 105.

#### Required:

- (a) Prepare dated journal entries to record the foregoing transactions. Show all computations where necessary. (20 marks)
- (b) What amounts would be reported on Prucha's Income Statement and Balance Sheet on December 31, 2005? It is not necessary to prepare the actual income statement or balance sheet. (5 marks)

#### Note:

Use pages 11, 12 and 13 of your exam booklet for the answer to this question.

#### Answer:

(a)

#### March 31, 2005

<i>Investment in Staal Common (400 x \$25) + \$180</i>	<i>10,180</i>	
<i>Cash (\$10,000 + \$180)</i>		<i>10,180</i>

#### June 1, 2005

<i>Investment in Oleg Bonds (at par) + \$700</i>	<i>200,700</i>	
<i>(Accrued) Interest receivable (\$200,000 x 8% x 5/12)</i>	<i>6,667</i>	
<i>Cash (\$200,000 + \$6,667)</i>		<i>207,367</i>

June 30, 2005

Cash	8,000	
(Accrued) Interest receivable		6,667
Interest revenue ( $\$200,000 \times 8\% \times 1/12$ )		1,333

December 31, 2005

Cash	8,000	
Interest revenue ( $\$200,000 \times 8\% \times 6/12$ )		8,000

December 31, 2005

Unrealized holding loss - Staal [ $\$10,180 - (\$22 \times \$400)$ ]	1,380	
Investment in Staal Common		1,380
Investment in Oleg Bond [ $\$204,000 - \$200,700$ ]	3,300	
Unrealized holding gain – Oleg Bond		3,300

March 31, 2006

Cash ( $400 \times \$3.75/\text{share}$ )	1,500	
Dividend revenue (income) – Staal Common		1,500

April 1, 2006

Cash [ $(100 \times \$28/\text{share}) - \$80$ ]	2,720	
Investment in Staal Common ( $25\% \times \$8,800$ )		2,200
Realized gain on sale [ $\$2,720 - (25\% \times \$10,180)$ ]		175
Unrealized holding loss – Staal Common ( $25\% \times \$1,380$ )		345

May 1, 2006

Cash [ $(\$200,000 \times 103) + (8\% \times \$200,000 \times 4/12)$ ]	211,333	
Unrealized holding gain – Oleg Bond	3,300	
Interest revenue		5,333
Realized gain on sale ( $\$206,000 - \$200,700$ )		5,300
Investment in Oleg Bond		204,000

September 30, 2006

Cash ( $300 \times \$3.50/\text{share}$ )	1,050	
Dividend revenue (income) – Staal Common		1,050

December 31, 2006

Investment in Staal Common	1,200	
Unrealized holding gain – Staal Common [ $(300 \times 26) - (300 \times 22)$ ]		1,200

(b) 2005 Income statement (Prucha)

Dividend revenue	nil
Interest revenue ( $\$8,000 + \$1,333$ )	9,333

2005 Balance Sheet (Prucha)

Assets:	
Available for sale investments	
Staal Common (400 shares)	8,800
Oleg Bond	204,000
Shareholders Equity - OCI	
Unrealized holding gain (net)	1,920 ( $\$1,380 \text{ HL} - \$3,300 \text{ HG}$ )