Practice Exam 1 – Financial Accounting for IB/E&BE

Exercise 1

On the balance sheet as of December 31, 2014, Groningen Robotics Corporation reported its stockholders' equity as follows:

Preferred Stock, 9% noncumulative, 100 par value, 10,000 shares authorized, 5,000 shares issued and outstanding	$500,000
Common Stock, $5 par value, 1,500,000 shares authorized, 600,000 shares issued and outstanding	3,000,000
Additional Paid-in Capital-Common Stock	1,250,000
Retained Earnings	2,967,000
Total stockholders' equity	**$7,717,000**

During 2015, the following transactions occurred:

Feb 12	Issued 30,000 shares of its $5 par value common stock for $750,000 cash.
Feb 22	Purchased 5,000 shares of its own stock for $30 per share, the current market price.
Feb 28	Issued 10,000 shares of its $5 par value common stock in exchange for land and a building. The building is estimated to have a market value of $170,000. Market value of stock is $30. Management records land at market value of stock minus market value of building
March 9	Sold 1,000 shares of treasury stock purchased on Feb 22 for $31 per share
April 30	Declared cash dividend for a full year to preferred stockholders and a stock dividend for common stockholders. Dividend to preferred stockholders is to be paid on June 30 2015 to shareholders of record on May 1, 2015. Declared & issued a 10 percent stock dividend (Market value of the stock was $35.00 on April 30 and $28.00 on June 30).
May 1	Sold 2,500 shares of treasury stock purchased on Feb 22 for $30 per share.
May 1	Date of record
May 7	Sold 1,500 shares of treasury stock purchased on Feb 22 for $27 per share.
June 30	Distributed the dividend.
Sep 1	Declared a 2-for-1 stock split.

Question A

Record the above transactions by preparing the appropriate journal. Skip a line between the different journal entries and state explicitly if no journal entry is needed. You are required to use accounts provided in the chart added at the end of this exam only.

Groningen Robotics Corporation, Journal				
Date	**Account**		**Debit**	**Credit**

Question B

Prepare the Statement of Stockholders' Equity as it should appear on December 31, 2015. There was no profit or loss to Groningen Robotics during 2015.

Groningen Robotics
Statement of Stockholders' Equity
For the Year Ended December 31, 2015

Contributed Capital		
Preferred Stock, 9% noncumulative, $100 par value, 10,000 shares authorized, 5,000 shares issued and outstanding		$
Common Stock, $________par value, 1,500,000 shares authorized, __________________ shares issued and outstanding	$	
Additional Paid-In Capital, Common Stock		
Paid-in Capital, Treasury Stock, Common		
Total Contributed Capital		$
Retained Earnings		
Total Contributed Capital & Retained Earnings		$
Less: Treasury Stock		
Total Stockholders' Equity		$

Question C

Issuing common and preferred stock generally has been popular among corporations. However, some companies have bought back their common stock. What are 3 reasons why a company would buy back its own shares?

Question D

Compute the book value per share of preferred stock and the book value per share of common stock. Assume a call value of $105 for preferred stock. Round your answer to the nearest cent.

Question E

Repeat the above calculations (assumed that total stockholders' equity of question D doesn't change) and now assume that the preferred stock is cumulative and has two years' dividends in arrears. Compute the book value per share of preferred stock and the book value per share of common stock. Again, provide your answer rounded to cents.

Exercise 2

Star Company is a trading company specialized in buying and selling plastic figurines based on movie characters. The financial year starts on January 1 and ends on December 31. Star Company's beginning balance sheet (in euros) on January 1, 2015, is as follows:

Balance sheet on January 1, 2015 (in euros)

Building	8,500,000	Mortgage payable	4,000,000
Accumulated depreciation - building	(700,000)	Accounts payable trade	440,000
Trucks	420,000	Salaries payable	40,000
Accumulated depreciation - trucks	(204,960)	Interest payable	100,000
Trade inventory	820,000	Common Stock	200,000
Accounts receivable (net)	650,000	Additional paid in capital	3,800,000
Cash	1,134,000	Retained earnings	2,039,040
Total	10,619,040	Total	10,619,040

The information provided in the footnotes is as follows:

Star Company uses the straight-line method to depreciate its building, and the double-declining balance method to depreciate its trucks. The trucks have an expected useful life of ten years and no residual value. The building has an expected useful life of twenty years and a residual value of € 5,000,000.

The interest on the mortgage is paid annually on June 30. The principal of the mortgage will be repaid in full on December 31, 2030.

All purchases and sales are on credit.

Accounts receivable trade (net) consists of the following items:

Accounts receivable trade (gross)	730,000
Allowance for uncollectible accounts	(80,000)
Accounts receivable trade (net)	650,000

During the year, write-offs are equal to € 54,000. Star Company uses the accounts receivable aging method to estimate the Allowance for uncollectible accounts. An analysis of the Accounts receivable shows that € 97,000 may be uncollectible.

Gross sales during 2015 are € 6,400,000. During the year, total sales discounts are € 450,000. € 300,000 worth of sales were returned to Star Company during the year.

The table below gives an overview of all cash receipts and cash expenditures during 2015 (in euros).

Schedule of cash receipts and expenditures over 2015 (in euros)

Receipts		**Expenditures**	
Payments on accounts receivable	3,825,000	Payments on accounts payable	4,050,000
		Salaries paid	150,000
		Interest paid	

On December 31, 2015, the amounts of the following balance sheet items are given:

Trade inventory	730,000
Accounts payable trade	380,000
Salaries payable	44,000

Question A
Use the information provided to determine the purchase date of the trucks. Use a calculation to support your answer.

Question B
Complete the schedule of cash receipts and expenditures over 2015 and calculate the Cash balance on December 31, 2015.

Question C
Calculate the uncollectible accounts expense over the year 2015 and determine the Allowance for uncollectible accounts balance on December 31, 2015.

Question D
Calculate the purchase of trade inventory over the year 2015.

Question E
Calculate the cost of goods sold over the year 2015.

Question F
Complete the income statement for 2015 and show your calculations.

Income statement, 2015 (in euros)

Cost of goods sold		Gross sales	
Salaries expense		Sales discounts	
Depreciation expense building		Sales returns and allowances	
Depreciation expense truck			
Interest expense			
Uncollectible accounts expense			
Net income			

Question G
Calculate the Accounts receivable trade (net) balance on December 31, 2015.

Question H
Complete the balance sheet on December 31, 2015 and show your calculations.

Balance sheet on December 31, 2015 (in euros)

Building		Mortgage payable	
Accumulated depreciation - building		Accounts payable trade	
Trucks		Salaries payable	
Accumulated depreciation - trucks		Interest payable	
Trade inventory		Common Stock	
Accounts receivable (net)		Additional paid in capital	
Cash		Retained earnings	
Total		Total	

Question I
Prepare the cash flow statement from operating activities according to the indirect method for the year 2015.

Cash flows from operating activities over 2015 (in euros)

Question J
Calculate the receivable turnover at the end of the year 2015.

Chart of accounts exercise 1 (in alphabetical order)

Accounts Payable
Accounts Receivable
Additional Paid-in Capital, Common Stock
Additional Paid-in Capital, Preferred Stock
Building
Cash
Cash Dividends
Common Stock
Common Stock Distributable
Dividends Payable
Land
Paid-in Capital, Treasury Stock
Preferred Stock
Retained Earnings
Stock Dividends
Treasury Stock

Answers practice exam 1 – Financial Accounting for IB/E&BE

Exercise 1

Question A

Groningen Robotics Corporation, Journal				
Date	**Account**		**Debit**	**Credit**
Feb 12	Cash		750,000	
		Common Stock		150,000
		Additional Paid-in Capital, Common Stock		600,000
Feb 22	Treasury Stock, Common		150,000	
		Cash		150,000
Feb 28	Land		130,000	
	Building		170,000	
		Common Stock		50,000
		Additional Paid-in Capital, Common Stock		250,000
March 9	Cash		31,000	
		Treasury Stock, Common		30,000
		Paid-in Capital, Treasury Stock		1,000
April 30	Cash Dividends		45,000	
		Dividends payable		45,000
	Stock Dividends		2,226,000	
		Common Stock		318,000
		Additional Paid-in Capital, Common Stock		1,908,000
	(600,000+30,000-5,000+10,000 +1,000)= 636,000 shares outstanding			
May 1	Cash		75,000	
		Treasury Stock, Common		75,000
May 1	No entry			
May 7	Cash		40,500	
	Paid-in Capital, Treasury Stock		1,000	
	Retained Earnings		3,500	
		Treasury Stock, Common		45,000
June 30	Dividends Payable		45,000	
		Cash		45,000
Sep 1	No entry or the following only:			
	The 703,600 shares of $5 par value of common stock issued and outstanding were split 2 for 1, resulting in 1,407,200 shares of $ 2.5 par value common stock			

	issued and outstanding 2*(600,000+30,000+10,000+63,600) =1,407,200 shares		

Question B

Groningen Robotics
Statement of Stockholders' Equity
For the Year Ended December 31, 2015

Contributed Capital		
Preferred Stock, 9% noncumulative, $100 par value, 10,000 shares authorized, 5,000 shares issued and outstanding		$
Common Stock, $__2.5____par value, 1,500,000 shares authorized, _____1,407,200______ shares issued and outstanding	$3,518,000	
Additional Paid-In Capital, Common Stock	4,008,000	
Paid-in Capital, Treasury Stock, Common	0	7,526,000
Total Contributed Capital		$
Retained Earnings		692,500
Total Contributed Capital & Retained Earnings		$8,718,500
Less: Treasury Stock		0
Total Stockholders' Equity		$8,718,500

Calculations

No of shares of common stock at year end = (600,000 +30,000 +10,000 + 63,600) * 2
=1,407,200

Additional Paid-in Capital-Common Stock = 1,250,000+600,000+250,000+1,908,000
=4,008,000

Retained Earnings = 2,967,000 – 45,000 – 2,226,000 – 3,500
=692,500

Question C

A company may have several reasons for buying back its own shares:

1. It may have uses for the shares, such as for employee stock purchase plans or purchasing other companies.
2. To increase the price of the company's stock.
3. To increase earnings per share: With fewer shares outstanding, earnings per share should be higher. When the economy has been growing slowly, this is a way to accelerate the growth in earnings per share.

4. To reduce the cash that will have to be paid in the future for cash dividends. With fewer shares outstanding, less cash will have to be paid.
5. Management feels that investing in the company's own stock is a sound idea because it is a good value.

Question D

Total stockholder's equity		$8,718,500
Less equity to preferred stockholders (5,000 x $100 x 1.05)	525,000	
Less dividends in arrears (0 as it is noncumulative)	0	
Equity allocated to preferred stockholders		525,000
Equity pertaining to common stockholders		$8,193,500

Book value per share of preferred stock ($525,000 ÷ 5,000)	$105.00
Book value per share of common stock ($8,193,500 ÷ 1,407,200)	$5.82

Question E

Total stockholder's equity		$8,718,500
Less equity to preferred stockholders (5,000 x $100 x 1.05)	525,000	
Less dividends in arrears (5,000 x $100 x .09 x 2)	90,000	
Equity allocated to preferred stockholders		615,000
Equity pertaining to common stockholders		$8,103,500

Book value per share of preferred stock ($615,000 ÷ 5,000)	$123.00
Book value per share of common stock ($8,103,500 ÷ 1,407,200)	$5.76

Exercise 2

Question A

The depreciable cost of the trucks is 420,000. Accumulated depreciation on Jan. 1, 2015, is 204,960. This means that the carrying value at that time is 215,040. Since the expected useful life is equal to ten years and the company uses the double declining balance, the annual depreciation rate is 20%. One year after the purchase, the carrying value is 420,000 * 0.80 = 336,000. Two years after the purchase the carrying value is 336,000 * 0.80 = 268,800, and after three years the carrying value is 268,800 * 0.80 = 215,040. Hence, the purchase date is **January 1, 2012.**

Question B

Interest paid: 4,000,000 * 5% = **200,000** (1 credit)
Cash balance 31/12/2015: 1,134,000+ 3,825,000 – 4,050,000 – 150,000 – 200,000 = **559,000**

Question C

Uncollectible accounts expense: the target balance for the allowance is 97,000. Beginning balance is 80,000, write-offs are 54,000. This means that the expense will need to be equal to 97,000 – 80,000 + 54,000 = 71,000

Ending balance: aging method is used, so given: **97,000**

Question D

Accounts Payable beginning + Purchases – Payments = Accounts Payable ending
440,000 + Purchases - 4,050,000= 380,000
Purchases = 3,990,000

Question E

Trade inventory beginning + Purchases – COGS = Trade inventory ending
820,000 + 3,990,000 - COGS = 730,000
Cost of goods sold = 4,080,000

Question F

The income statement for 2015 looks as follows

Cost of goods sold	4,080,000	Gross sales	6,400,000
Salaries expense	**154,000**	Sales discounts	(450,000)
Depreciation expense building	**175,000**	Sales returns and allowances	(300,000)
Depreciation expense truck	**43,008**		
Interest expense	**200,000**		
Uncollectible accounts expense	71,000		
Net income	<u>926,992</u>		

<u>Calculations</u>
Sales (and discounts and returns & allowances): given

Cost of goods sold: see question E

Salaries expense: salaries paid + change in salaries payable: payable has gone up, so this difference needs to be added to salaries paid: 150,000 + (44,000 – 40,000) = 154,000

Depreciation building: depreciable cost is 8,500,000 – 5,000,000 = 3,500,000. The depreciation rate is 5%, so depreciation expense is 0.05 * 3,500,000 = 175,000

Depreciation expense truck: The company uses the double-declining balance method, estimated life is ten years. This means that the annual depreciation rate is 20%. The carrying value of Trucks at the beginning of the year is 215,040. This means that depreciation expense is 0.2* 215,040 = 43,008

Interest expense: 4,000,000 * 5% = 200,000

Uncollectible accounts expense: see question C

Question G

Beginning balance for acc. rec. trade gross is 730,000 (given). During the year, acc. rec. trade gross was affected by net sales (5,650,000), payments on acc. rec. (3,825,000), and the write-offs (54,000). The ending balance for acc. rec. trade gross is therefore 730,000 + 5,650,000 – 3,825,000 – 54,000 = 2,501,000.

The ending balance for the Allowance is 97,000 (given), so the ending balance for acc. rec. trade (net) is 2,501,000 – 97,000 = 2,404,000.

Question H

Building	8,500,000	Mortgage payable	**4,000,000**
Accumulated depreciation - building	(875,000)	Accounts payable trade	380,000
Trucks	420,000	Salaries payable	44,000
Accumulated depreciation - trucks	(247,968)	Interest payable	**100,000**
Trade inventory	730,000	Common Stock	200,00
Accounts receivable (net)	2,404,000	Additional paid in capital	3,800,000
Cash	559,000	Retained earnings	**2,966,032**
Total	11,490,032	Total	11,490,032

Calculations

Acc. depr. building and trucks: beginning balance plus answers to question D and E

Trade inventory: given

Accounts receivable trade (net): see question G

Cash: see question B

Mortgage payable: remains the same; 4,000,000

Accounts payable trade: given

Salaries payable: given

Interest payable: 6/12 * 5% * 4,000,000 = 100,000

Common stock / additional paid in capital: given

Retained earnings: beginning + net income = 2,039,040+ 926,992 = 2,966,032

Question I

Cash flows from operating activities over 2015 (in euros)

Net income		926,992
Adjustments to reconcile net income to net cash		
Depreciation building	175,000	
Depreciation trucks	43,008	
Changes in current assets and current liabilities		
Decrease in trade inventory	90,000	
Increase in accounts receivable	-1,754,000	
Decrease in accounts payable	-60,000	
Increase in salaries payable	+4,000	
Net cash flows from operating activities	-575,000	

Question J

Receivable turnover = Net revenue / net average accounts receivable
= 5,650,000 / ((650,000 + 2,404,000) / 2) = 3.70