ACCT 2101
Third Exam – Version 1 Solution
Spring Semester, 2016

Name Key with Grading Guideline Section (12 or 1:30) ______
(please print clearly)

Pledge: On my honor, I have neither given nor received any unauthorized help on this exam.

____
(signed)

Instructions:

1. **You may NOT ask questions during the exam.** However, all notes you write to your instructor will be read and considered during the grading process.
2. You may use your ACCT 2101 Help Card during the exam. No other help is authorized. You must submit your Help Card with your exam.
3. You must use one of the authorized calculators – you may not use your own.
4. You must write legibly or your answers will not be graded.
5. **Do NOT pull this exam apart under any circumstances.**
6. Make sure you have **12** numbered pages including the cover sheet.
7. Good luck! ← Version 1 = No BF

Point Allocation:

Problem 1 (7 items @ 3 points each)	21
Problem 2	8
Problem 3	16
Problem 4	14
Problem 5	10
Problem 6	8
Problem 7	8
Problem 8	12
Free Points	3
Extra Credit Questions (below)	2
TOTAL AVAILABLE POINTS =	102 points

EXTRA CREDIT QUESTIONS:

(1) What is your professor's favorite movie of all time? Glory

(2) What is your favorite musical artist or group? Your choice

PROBLEM 1. Conceptual Multiple-Choice Questions. (These questions are taking the place of the open-ended conceptual questions that I usually ask. I think they will take much less time and will allow you plenty of time to complete the exam.) **CLEARLY CIRCLE YOUR ANSWER.**

1. Which of the following best describes the objective of depreciation?

   A. To allocate the cost of a tangible asset to the periods in which its use contributes to earning revenue. T

   B. To estimate the remaining useful life of the asset. F

   C. To report the asset on the balance sheet at the estimated amount for which the asset could be sold on the balance sheet date. F

   D. To estimate the current market value of the asset. F

2. Which method of depreciation results in periodic depreciation expense that fluctuates from one period to the next, not necessarily in a steadily upward or downward direction?

   A. Straight-line.

   B. Units-of-production.

   C. Modified accelerated cost recovery system.

   D. Double-declining-balance.

3. Under what conditions would a company most likely adopt the double-declining-balance method for financial reporting?

   A. The company has high technology, robotic equipment in its plant that becomes obsolete quickly and declines in utility to the company more rapidly in the early years of the assets' lives.

   B. The company wants to maximize its net income during the earlier years of the asset's life. F

   C. The company wants to maximize the asset's book value in the earlier years of the asset's life. F

   D. The company wants to maximize the total depreciation expense over the life of the asset. F

   (Total depreciation will be the same across all methods.)

PROBLEM 1 – continued.

4. Which of the following properly describes the accounting for goodwill?

   A. Goodwill is recorded when it is internally generated. F

   B. Goodwill is amortized over its useful life. F

   C. Goodwill is the difference between the amount paid for a company relative to the book value of the acquired company's net assets. F ← No - market value

   D. Goodwill is written down when it has been determined to be impaired. T

5. Which of the following properly describes the accounting for a patent?

   A. Research and development costs associated with a patent are capitalized. F

   B. The patent will be amortized over its useful life. T

   C. Patent amortization expense is accounted for within the accumulated depreciation account. F

   D. A patent's legal life extends to 70 years after the death of the inventor. F

6. Which of the following is <u>not</u> a reason that a corporation would want to issue bonds instead of stock?

   A. Interest payments can be deducted for income tax purposes. Advantage

   B. Stockholders maintain control. Advantage

   C. The impact on earnings from using borrowed money may be positive. Advantage

   D. There is less risk associated with a bond issue. Disadvantage

7. Purdum Farms borrowed $10 million by signing a five-year note on December 31, 2013. Repayments of the principal are payable annually in installments of $2 million each. Purdum Farms makes the first payment on December 31, 2014 and then prepares its balance sheet. What amount will be reported as current and long-term liabilities, respectively, in connection with the note at December 31, 2014, after the first payment is made?

   A. $2 million in current liabilities and $8 million in long-term liabilities.

   B. $2 million in current liabilities and $6 million in long-term liabilities.

   C. Zero in current liabilities and $8 million in long-term liabilities.

   D. Zero in current liabilities and $10 million in long-term liabilities.

$10 million – $2 million paid on 12/31/14 = $8 million outstanding at 12/31/14

$2 million will be paid in the next year

$6 million is still long-term

PROBLEM 2. (8 points)

Debby Turner was at home when she received a call from the fire department telling her that her store had burned to the ground. Her business was a total loss. The insurance company required her to prove her inventory loss before they would pay the claim. From the beginning of the year until the date of the fire, Debby's company had net sales of $800,000 and net purchases of $560,000. Transportation-in amounted to $27,000, and beginning inventory was $70,000. Debby always priced her goods to achieve a gross margin of 35%.

REQUIRED: Compute Debby's estimated inventory loss using the gross margin method. SHOW AND **LABEL** ALL OF YOUR WORK TO RECEIVE ANY CREDIT.

Estimated Inventory:

Beginning Inventory		$ 70,000
Add: Net purchases	560,000	
Add: Transportation in	27,000	
Net Cost of Purchases		587,000
Cost of Goods Available		657,000
Less: Estimated Cost of Goods Sold:		
Net Sales	800,000	
Less: Estimated gross margin (800,000 × 35%)	<280,000>	
Estimated COGS		520,000
Estimated Ending Inventory		$137,000

Cost	295,000
Accum Depr	<130,500>
Book Value	164,500

PROBLEM 3. (16 points)

Equipment costing $295,000, on which $130,500 of up-to-date accumulated depreciation has been recorded, was disposed of on January 1 of the current year. Prepare the journal entries required to record the equipment's disposal under each of the following unrelated assumptions.

(1) The equipment was sold for $239,200 cash.

Cash	239,200		4
Accumulated Depreciation	130,500		
Equipment		295,000	
Gain on Sale		74,700	

(2) The equipment was sold for $136,800 cash.

Cash	136,800		4
Accum Depreciation	130,500		
Loss on Sale	27,700		
Equipment		295,000	

(3) The equipment was retired from service and hauled to the junkyard. No material was salvaged.

Accum Depreciation	130,500		4
Loss on Retirement	164,500		
Equipment		295,000	

(4) The equipment was completely destroyed in a fire. Cash of $105,000 is expected to be recovered from the insurance company.

Insurance Receivable	105,000		4
Accum Depreciation	130,500		
Loss on Destruction	59,500		
Equipment		295,000	

Asset Cost:

Invoice	4,630,000	
Transport	23,000	
Install/test	92,000	4,745,000

PROBLEM 4. (14 points)

The Good Company acquired and placed into use equipment on January 1, 2014, at a cash cost of $4,630,000. Transportation charges amounted to $23,000, and installation and testing costs totaled $92,000.

The equipment was estimated to have a useful life of seven years and a residual value of $55,000 at the end of its life. It was further estimated that the equipment would be used in the production of 938,000 units of product during its life. In 2014, 62,000 units of product were produced. In 2015, 73,000 units of product were produced.

REQUIRED: Compute the depreciation to the nearest dollar for 2014 and 2015 using each of the following methods (SHOW AND LABEL YOUR WORK):

(a) Straight-line method.

4

2014: (4,745,000 − 55,000)/7 = $670,000

2015: $670,000 (same)

(b) Units-of-production method.

Depreciation per Unit = (4,745,000 − 55,000)/938,000 units = $5 per unit

4

2014: 62,000 units x $5 = $310,000

2015: 73,000 units x $5 = $365,000

(c) Double-declining-balance method.

S/L Rate = 1/7 = 14.29% (rounded)

DDB Rate = 2 x 14.29% = 28.58%

4

2014: (4,745,000 − 0) x 28.58% = $1,356,121

2015: (4,745,000 − 1,356,121) x 28.58% = $968,542

PROBLEM 5. (10 points)

The Turner Mining Company purchased a tract of land containing ore for $830,000. The company then spent $130,000 developing the site. The company has determined that 600,000 tons of ore exist on the tract, but only 500,000 tons can be economically removed. When the company finishes with the tract, it estimates the land will be worth $150,000. **You must show and label all of your work to receive any credit.**

REQUIRED:

(a) Compute the depletion cost per ton of ore.

(b) Prepare the journal entry to record depletion costs in the first year assuming that 82,000 tons of ore are removed.

(c) Prepare the journal entry to allocate depletion costs assuming that 47,000 tons of ore are sold.

4

(a) Total tract $830,000
+ Development 130,000
− Residual Value of Land <150,000>
Depletable Cost $810,000 ÷ 500,000 tons = $1.62 per ton

3

(b) Depletion	132,840	
Accum Depletion		132,840

(82,000 tons × $1.62 = 132,840)

3

(c) Cost of Goods Sold*	76,140	
Inventory	56,700	
Depletion		132,840

* 47,000 tons × $1.62 = $76,140

PROBLEM 6. (8 points)

Hanson Company purchased a piece of equipment for $590,000 and placed it in operation on January 1, 2013. Depreciation was recorded for 2013 and 2014 using the straight-line method, an 8-year life, and an expected residual value of $24,000. Based on the Hanson Company's usage of the equipment through 2014, they believe that the useful life of the equipment will be longer than they had originally estimated. They have revised the estimated life of the equipment to be a *total* of 11 years. Because they will be keeping the equipment in service longer, they have reduced their estimate of the residual value to $9,000.

REQUIRED: Compute the depreciation expense on the equipment for 2015 assuming that Hanson Company has been reporting on a December 31 year-end. Please round to dollars at every step. **You must show and label all of your work to receive any credit.**

Original Depreciation = (590,000 − 24,000)/8 years = $70,750 per year

Book Value at 1/1/15:

Cost	590,000	
Accum Depr	141,500	(2 years x $70,750)
Book Value	448,500	

Recompute depreciation:

Book Value	448,500
Revised Residual Value	<9,000>
Depreciable Cost	439,500
÷ Years Remaining	÷ 9 years
Annual Depreciation	$ 48,833

PROBLEM 7. (8 points)

The Turner Company acquired the Hanson Company for a cash price of $2,975,000. In addition, the Turner Company assumed all liabilities of the Hanson Company as part of the acquisition. The following are the fair market values of the assets and liabilities of the Hanson Company that were acquired:

Accounts Receivable	$ 485,000	Assets = 2,197,000
Inventories	510,000	
Property, Plant, and Equipment	689,000	
Patents	513,000	
Accounts Payable	139,000	Liabilities = 341,000
Notes Payable	202,000	

REQUIRED: Goodwill = (2,975,000 + 341,000) − 2,197,000 = 1,119,000

(1) Record the **COMPLETE** journal entry to recognize the acquisition of the Hanson Company by the Turner Company. You must show your computation of Goodwill to be eligible for partial credit.

6

Accounts Receivable	485,000	
Inventories	510,000	
Property, Plant, an Equipment	689,000	
Patents	513,000	
Goodwill	1,119,000	
Accounts Payable		139,000
Notes Payable		202,000
Cash		2,975,000

(2) At the end of the second year after the acquisition, the fair value of the Goodwill has decreased by $300,000. Record the journal entry to recognize this decrease in value.

2

Loss from Goodwill Impairment	300,000	
Goodwill		300,000

PROBLEM 8. (12 points)

We discussed three ratios (see below) that are used in assessing a company's management of inventories and working capital.

REQUIRED: Compute these three metrics for the two most recent years provided in Nike's annual report (on the following two pages). Nike's Inventories balance for the year ended May 31, 2013, was \$3,484. YOU MUST SHOW ALL OF YOUR WORK!

(1) Gross Profit Percentage: Gross Margin / Net Sales

4

2015: 14,067/30,601 = 45.97 %

2014: 12,446/27,799 = 44.77 %

(2) Inventory Turnover: Cost of Goods Sold / Average Inventory

4

2015: 16,534/((4,337+3,947)÷2) = 16,534 ÷ 4,142 = 3.99 times

2014: 15,353/((3,947 + 3,484)÷2) = 15,353 ÷ 3,715.5 = 4.13 times

(3) Working Capital: Current Assets − Current Liabilities

4

2015: 15,976 − 6,334 = \$9,642

2014: 13,696 − 5,027 = \$8,669

NIKE, Inc. Consolidated Statements of Income

(In millions, except per share data)	Year Ended May 31, 2015	2014	2013
Income from continuing operations:			
Revenues	$ 30,601	$ 27,799	$ 25,313
Cost of sales	16,534	15,353	14,279
Gross profit	14,067	12,446	11,034
Demand creation expense	3,213	3,031	2,745
Operating overhead expense	6,679	5,735	5,051
Total selling and administrative expense	9,892	8,766	7,796
Interest expense (income), net (Notes 6, 7 and 8)	28	33	(3)
Other (income) expense, net (Note 17)	(58)	103	(15)
Income before income taxes	4,205	3,544	3,256
Income tax expense (Note 9)	932	851	805
NET INCOME FROM CONTINUING OPERATIONS	**3,273**	**2,693**	**2,451**
NET INCOME FROM DISCONTINUED OPERATIONS	**—**	**—**	**21**
NET INCOME	**$ 3,273**	**$ 2,693**	**$ 2,472**
Earnings per common share from continuing operations:			
Basic (Notes 1 and 12)	$ 3.80	$ 3.05	$ 2.74
Diluted (Notes 1 and 12)	$ 3.70	$ 2.97	$ 2.68
Earnings per common share from discontinued operations:			
Basic (Notes 1 and 12)	$ —	$ —	$ 0.02
Diluted (Notes 1 and 12)	$ —	$ —	$ 0.02
Dividends declared per common share	$ 1.08	$ 0.93	$ 0.81

The accompanying Notes to the Consolidated Financial Statements are an integral part of this statement.

FORM 10-K

11 of 12

NIKE, Inc. Consolidated Balance Sheets

(In millions)	May 31, 2015	May 31, 2014	2013
ASSETS			
Current assets:			
Cash and equivalents (Note 6)	$ 3,852	$ 2,220	
Short-term investments (Note 6)	2,072	2,922	
Accounts receivable, net (Note 1)	3,358	3,434	
Inventories (Notes 1 and 2)	4,337	3,947	3,484
Deferred income taxes (Note 9)	389	355	
Prepaid expenses and other current assets (Notes 6 and 17)	1,968	818	
Total current assets	15,976	13,696	
Property, plant and equipment, net (Note 3)	3,011	2,834	
Identifiable intangible assets, net (Note 4)	281	282	
Goodwill (Note 4)	131	131	
Deferred income taxes and other assets (Notes 6, 9 and 17)	2,201	1,651	
TOTAL ASSETS	$ 21,600	$ 18,594	
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Current portion of long-term debt (Note 8)	$ 107	$ 7	
Notes payable (Note 7)	74	167	
Accounts payable (Note 7)	2,131	1,930	
Accrued liabilities (Notes 5, 6 and 17)	3,951	2,491	
Income taxes payable (Note 9)	71	432	
Total current liabilities	6,334	5,027	
Long-term debt (Note 8)	1,079	1,199	
Deferred income taxes and other liabilities (Notes 6, 9, 13 and 17)	1,480	1,544	
Commitments and contingencies (Note 16)			
Redeemable preferred stock (Note 10)	—	—	
Shareholders' equity:			
Common stock at stated value (Note 11):			
Class A convertible — 178 and 178 shares outstanding	—	—	
Class B — 679 and 692 shares outstanding	3	3	
Capital in excess of stated value	6,773	5,865	
Accumulated other comprehensive income (Note 14)	1,246	85	
Retained earnings	4,685	4,871	
Total shareholders' equity	12,707	10,824	
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 21,600	$ 18,594	

The accompanying Notes to the Consolidated Financial Statements are an integral part of this statement.

FORM 10-K

12 of 12