Practice for Quiz 2 #1 – ACCT 101 Prepared by Dr. Richard M. Crowley
Rubric

Name: _____ Section: G___ Score: ____ / 100

This quiz is worth 7.5% of the overall course grade and should take up to 75 minutes to complete. The quiz will be graded out of a total of 100 points. Read each question carefully, and do your best to answer it. Make sure to show your work when answering questions, as partial credit will be awarded for work that, while not leading to the correct answer, shows significant progress towards it.

Question 1: Inventory (18 marks)

InTune Wireless is a reseller of a Tristar brand cell phones. They currently carry two phones: The Universe S6 and the Universe S7. They started the year with 100 of each phone – the Universe S7 on hand cost them $400 per phone, while the Universe S6 on hand cost them $200 per phone. The company does an inventory check and adjusts their COGS at the end of each month.

A) The following transactions occurred during the month of January 2016. What should their COGS be if they follow Perpetual FIFO? What should COGS be if they follow Perpetual LIFO? What should their COGS be if they follow Perpetual Average Cost? **(6 marks)**
   - Jan 3: Sold 10 Universe S7; sold 10 Universe S6
   - Jan 4: Sold 15 Universe S7
   - Jan 8: Bought 50 Universe S7 at $350 each
   - Jan 15: Sold 30 Universe S7; sold 50 Universe S6
   - Jan 20: Sold 30 Universe S7; bought 10 Universe S6 at $150 each
   - Jan 25: Sold 20 Universe S7; sold 20 Universe S6

FIFO COGS	LIFO COGS	Average Cost COGS
$ 57,750	$55,000	$56,200

Commented [RC1]: 2 if correct; 1 if math error or remaining inventory balance; 0 else

Commented [RC2]: 2 if correct; 1 if math error or remaining inventory balance; 0 else

Commented [RC3]: 2 if correct; 1 if math error or 55,886.36 (periodic average cost); else 0

	FIFO					LIFO					Average Cost			
	S7		S6			S7		S6			S7		S6	
Trans	$400	$350	$200	$150		$400	$350	$200	$150		$400	$380	$200	$190
0	100		100			100		100			100		100	
1	90		90			90		90			90		90	
2	75		90			75		90			75		90	
3	75	50	90			75	50	90				125	90	
4	45	50	40			75	20	40				95	40	
5	15	50	40	10		65	0	40	10			65		50
6	0	45	20	10		45	0	30	0			45		30

Inventory Available = $100 \times \$400 + 100 \times \$200 + 50 \times \$350 + 10 \times \$150 = \$79{,}000$

Remaining Inventory:

$Remaining\ FIFO = 45 \times \$350 + 20 \times \$200 + 10 \times \$150 = \$21{,}250$

$Remaining\ LIFO = 45 \times \$400 + 30 \times \$200 = \$24{,}000$

$Remaining\ Avg\ Cost = 45 \times \$380 + 30 \times \$190 = \$22{,}800$

COGS = Inventory Available – Remaining Inventory

[Question 1 continued]

B) In February 2016, InTune Wireless decided to try selling a new phone model, the Jot 7. They acquired 20 phones for a trial run, buying each at $450. This purchase was made in cash. A few days later, it was discovered that the Jot 7 was predisposed to exploding, so they decided to return the phones for a refund on credit. Record the journal entry for the purchase and the subsequent return. **(8 marks)**

ENTRY	ACCOUNT	DR	CR
PURCHASE	Inventory	9,000	
	Cash		9,000
RETURN	Accounts Receivable	9,000	
	Inventory		9,000

Each entry: 1 for each account name; 1 for correct value; 1 for balancing

C) In March 2016, a new phone was released: The Universe S8. At the end of the month, InTune Wireless had 30 Universe S7 phones on hand at an inventory value of $10,500 and 10 Universe S6 phones on hand at an inventory value of $2,000. Due to the launch of the new phone, the Net Realizable Value of these phones dropped down to $300 per Universe S7 and $200 per Universe S6. Consequently, an inventory write-down is needed. Record the journal entry for this write-down. **(4 marks)**

ENTRY	ACCOUNT	DR	CR
WRITE-DOWN	Inventory write-down	1,500	
	Inventory		1,500

Commented [RC4]: Book incorrectly uses COGS, so not penalized if COGS is used here.

Loss amount is calculated as:

$$Loss = [Inv_1 - \min(Inv_1, NRV_1)] + [Inv_2 - \min(Inv_2, NRV_2)] = 10500 - 9000 + 2000 - 2000 = 1500$$

Entry: 1 for each account name; 1 for values; 1 for balance.
-1 if DR and CR switched
-2 if entry includes non-net-0 amount for S6 inventory

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Question 2: PP&E (24 points; 4 marks per entry)

On March 1, 2013, TriStar purchased a set of battery manufacturing equipment and machinery for $50,000, as a competitor was looking to sell off its battery division. If TriStar purchased the assets on the market, the machinery would cost $42,000 and the equipment would cost $18,000. To set the equipment up, TriStar incurred $1,000 in shipping costs, and $3,000 in maintenance costs.

TriStar expects both the machinery and the equipment to last 3 years. The machinery should follow double declining balance depreciation with a salvage value of $10,000, while the equipment should follow straight line depreciation with no salvage value.

A) What is the journal entry that TriStar would record for this purchase, including setup costs?
B) What would the depreciation entry be for each asset in years 1 and 2, assuming Tristar has a February 28 year end?
C) At the start of the third year, TriStar paid $10,000 to extend the useful life of the machinery by 1 year. Record this transaction.
D) Record depreciation for year 3
E) In February 2016, the batteries produced by the acquired machinery began exploding. Consequently, TriStar decided to scrap the machinery and equipment on March 1, 2016. Record this disposal.

ENTRY	ACCOUNT	DR	CR
A) PURCHASE	Machinery	35,000	
1 MAR 2013	Equipment	19,000	
	Cash		54,000
B) DEPR, Y1	Depreciation Expense	29,666	
28 FEB 2014	Accumulated Depr. -- Machinery		23,333
	Accumulated Depr. -- Equipment		6,333
B) DEPR, Y2	Depreciation Expense	8,000	
28 FEB 2015	Accumulated Depr. -- Machinery		1,667
	Accumulated Depr. -- Equipment		6,333
C) EXTEND	Machinery	10,000	
1 MAR 2015	Cash		10,000
D) DEPR Y3	Depreciation Expense	16,334	
29 FEB 2016	Accumulated Depr. -- Machinery		10,000
	Accumulated Depr. -- Equipment		6,334
E) DISPOSAL	Accumulated Depr. – Machinery	35,000	
1 MAR 2016	Loss on asset retirement	10,000	
	Machinery		45,000
	Acc. Depr. -- Equipment	19,000	
	Equipment		19,000

Commented [RC5]: 1 for account names
1 for each value
Only 1 off if not capitalized

Commented [RC6]: 1 for account names
2 for values
1 for balancing

Commented [RC7]: 1 for account names
2 for values
1 for balancing

Commented [RC8]: 1 for each account name
1 for values
1 for balancing

Commented [RC9]: 1 for account names
2 for values
1 for balancing

Commented [RC10]: 1 for loss on asset retirement
1 for other account names
1 for loss amount
1 for other amounts

[Question 2 continued]

(Space for work)

Depreciation Calculations:

Machine

Year 1 (DDB): $35{,}000 \times \frac{2}{3} = 23{,}333$

Year 2 (DDB): $(35{,}000 - 23{,}333) \times \frac{2}{3} = 7{,}778.\ NAV - 7{,}778 <\ 10{,}000\ salvage$

Use $35{,}000 - 23{,}333\ [acc\ depr] - 10{,}000\ [salvage] = 1{,}667$ for depreciation

Year 3: Add 10,000 to carrying value. Under DDB, depreciation in year 3 will be at least 10,000 (which is the difference between carrying value and salvage value after part C), so depreciate by 10,000.

Equipment:

Year 1, 2, 3 (Straight Line): $(19{,}000 - 0\ salvage) \times \frac{1}{3} = 6{,}333$

6,334 in last year to fix rounding.

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Question 3: PP&E, Notes Payable (20 marks; 4 marks per entry)

Returning to InTune Wireless, in June 2016 the company decided to purchase a small regional rival, Tuned Wireless, for $20,000.

To finance the acquisition, InTune issued a 1 year, 5% note payable to TriStar for $20,000 on June 1, 2016. Then, using the proceeds from this note payable, InTune acquired a small regional rival, Tuned Wireless, for $20,000 on June 15, 2016. The company had net assets of $10,000 and no liabilities.

A) Record the issuance of the note payable.
B) Record the acquisition of Tuned Wireless. Assume all assets acquired were inventory.
C) Record the adjusting entry needed on December 31, 2016, related to the note payable. [*Round to the nearest integer*]
D) On December 31, 2016, the intangible component of what InTune acquired of Tuned Wireless had no remaining value. Record the write-down needed.
E) On May 31, 2017, InTune paid back the note payable in full. Record this transaction. [*Round to the nearest integer*]

ENTRY	ACCOUNT	DR	CR
A) NOTE	Cash	20,000	
1 JUN 2016	Note Payable		20,000
B) ACQUIRE	Inventory	10,000	
15 JUN 2016	Goodwill	10,000	
	Cash		20,000
C) ADJUSTMENT	Interest Expense	583	
31 DEC 2016	Interest Payable		583
D) WRITE-DOWN	Impairment expense	10,000	
31 DEC 2016	Goodwill		10,000
E) NOTE	Interest Expense	417	
31 MAY 2016	Interest Payable	583	
	Note Payable	20,000	
	Cash		21,000

Interest Expense for entry C is $20{,}000 \times 5\% \times \frac{7mo}{12mo} = 583$
Interest Expense for entry E is $20{,}000 \times 5\% \times \frac{5mo}{12mo} = 417$

Commented [RC11]: 1 for each account name
1 for values
1 for balancing

Commented [RC12]: 1 for goodwill
1 for other account names
1 for values other than cash
1 for balancing and cash amount

Commented [RC13]: 1 for each account
2 for values – 1 if 500 instead of 583

Commented [RC14]: 1 for account names
1 for values
1 for balancing

Commented [RC15]: 1 for interest payable
1 for other account names
1 for interest expense value
1 for other values

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Question 4: Bonds (38 marks)

After TriStar's battery issues, they decided to purchase a company with battery manufacturing expertise. However, they did not have sufficient cash to purchase the company on hand. Consequently, on June 1, 2016 they chose to issue an 8% coupon (semiannual), $150M, 10-year bond to raise the necessary capital.

A) If the bond was issued at par, what would be the journal entry to record this issuance, the first coupon payment (November 30, 2016), the adjusting entry for interest expense on February 28, 2017 (*treat this as the end of the month*), and the coupon payment on May 31, 2017? **(4 marks per entry)**

ENTRY	ACCOUNT	DR	CR
ISSUE	Cash	150	
1 JUN 2016	Bonds Payable		150
COUPON 1	Interest Expense	6	
30 NOV 2016	Cash		6
ADJUSTING	Interest Expense	3	
ENTRY	Interest Payable		3
28 FEB 2017			
COUPON 2	Interest Expense	3	
31 MAY 2017	Interest Payable	3	
	Cash		6

Commented [RC16]: 1 for each account name
1 for values
1 for balancing

Commented [RC17]: 1 for each account name
1 for values
1 balancing

Commented [RC18]: 1 for each account name
1 for values
1 for balancing and payable CR

Commented [RC19]: 1 for interest payable
1 for other account names
1 for interest expense value
1 for other values

Coupon 1:

$$IE = Paid = \frac{Coupon}{m} = \frac{150 \times 8\%}{2} = 6$$

Coupon 2:

$$IE = Paid = \frac{Coupon}{m} = \frac{150 \times 8\%}{2} = 6$$

For adjusting entry, ½ of each is recognized. For the coupon payment in May, ½ of each is recognized.

[Question 4 continued]

B) Due to the negative news from the battery issues, TriStar had to settle for a 10% yield on the bond issue. What was the bond price at issue (round to the nearest million)? Record the journal entry for this bond issue, the first coupon payment (November 30, 2016), the adjusting entry for interest expense on February 28, 2017 (*treat this as the end of the month*), and the coupon payment on May 31, 2017. Use the effective interest method. [*Round to two decimal places*] **(3 marks for bond price, 4 marks per journal entry)**

Bond Price (Millions)
$ 131.31

$$Price = \frac{CF}{r}\left[1 - \frac{1}{(1+r)^T}\right] + \frac{150}{(1+r)^t}$$
$$= \frac{150 \times 4\%}{5\%}\left[1 - \frac{1}{(1+5\%)^{20}}\right] + \frac{150}{(1+5\%)^{20}} = 131$$

Commented [RC20]: 3 if correct
2 if math error
1 if some substantive work shown towards answer
0 else

ENTRY	ACCOUNT	DR	CR
ISSUE	Cash	131.31	
1 JUN 2016	Discount on Bonds Payable	18.69	
	Bonds Payable		150
COUPON 1	Interest Expense	6.57	
30 NOV 2016	Discount on Bonds Payable		0.57
	Cash		6
ADJUSTING	Interest Expense	3.30	
ENTRY	Discount on Bonds Payable		0.30
28 FEB 2017	Interest Payable		3
COUPON 2	Interest Expense	3.30	
31 MAY 2017	Interest Payable	3	
	Discount on Bonds Payable		0.30
	Cash		6

Commented [RC21]: 1 for discount
1 for other account names
1 for interest expense amount
1 for other values

Commented [RC22]: 1 for discount
1 for other account names
1 for discount amount
1 for other values
-1 if straight line amortization

Commented [RC23]: 1 for discount
1 for other account names
1 for discount amount
1 for other values
-1 if straight line amortization

Commented [RC24]: 1 for discount
1 for other account names
1 for discount and interest expense amounts
1 for other values
-1 if straight line amortization

Coupon 1:

$$IE = Carry \times r = 131.31M \times 5\% = 6.57 \quad Paid = \frac{Coupon}{m} = \frac{150 \times 8\%}{2} = 6$$

Coupon 2:

$$IE = Carry \times \frac{yield}{m} = 131.88M \times \frac{10\%}{2} = 6.59 \quad Paid = \frac{Coupon}{m} = \frac{150 \times 8\%}{2} = 6$$

For adjusting entry, ½ of each is recognized. For the coupon payment in May, ½ of each is recognized.

C) What is the total amount of extra interest expense that TriStar will incur on the bond issued in part B compared to the bond in part A? [*Round to the nearest integer*] *[Hint: You do not need to calculate interest expense for each period of the bond to answer this question.]* **(3 marks)**

Extra Interest Expense (Millions)
$ 18.69

Solution: Par value – Price = 150M – 131M = 19M