

Name: Version A - Solution Key

ACCT 2101
Exam #3 Fall 2013
Prof. J. M. Turner

INSTRUCTIONS – Please read before you take the exam.

1. This is a closed book and closed notes quiz. You must do your own work without assistance from anyone. Giving or receiving assistance from anyone during the exam will result in a grade of zero and reporting to the Office of Student Integrity. To attest to your compliance with this instruction and the Georgia Tech honor system, please sign the honor pledge below before turning in your exam. There is a 4 point penalty if you fail to sign the honor pledge.
2. To treat all students equally, I do not answer questions during an exam. Answer each question based on the information given.
3. For 2 bonus points, circle the star on page seven of the exam.
4. You may use only a calculator supplied by me. You may not use your cell phone or personal computer during the exam. Use of your cell phone during the exam is considered cheating and a violation of the Honor System.
5. Each multiple-choice question has only one best answer. If you choose more than one answer, it will be considered an incorrect answer. Enter your answer to the multiple choice questions on the Scantron sheet provided. What you enter on the Scantron sheet is your answer for grading purposes. Please totally erase changes on the Scantron or get a clean Scantron form and re-enter your answers. There is a 4 point penalty if you fail to enter your answers on a Scantron form.

6. Point allocation:

Terminology matching – 12 @ 2 points each	24
Problems (2)	33
Multiple choice – 18 @ 3 points each	<u>54</u>
Total	<u><u>111</u></u>

Grades will be expressed as a percentage of total available points.

Honor Pledge:

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

(Signed)

If you do not want your graded exam returned to the grading bins for this class, please sign below.

Do not return my graded exam to the bin: _____

Matching (2 points each) – Match the terms with the definition phrase that best describes it. Terms may be used only once.

A	Accrued liabilities
B	Acquisition cost
C	Amortization
D	Annuity
E	Asset impairment
F	Bond discount
G	Bond premium
H	Bond principal
I	Callable bond
J	Capital lease
K	Compound interest
L	Contingent liability
M	Convertible bond

N	Coupon rate
O	Current liabilities
P	Depreciation
Q	Indenture
R	Intangible assets
S	Liquidity
T	Long term liabilities
U	Net book value
V	Operating lease
W	Residual value
X	Solvency
Y	Tangible assets
Z	Time value of money

- J 1 A lease that is in substance a purchase and results in the recording of an asset and liability
- L 2 A potential liability that arises from a past event or transaction and is dependent on a future event.
- Y 3 Assets that have physical substance.
- T 4 Debts and obligations due beyond one year or beyond the normal operating cycle
- A 5 Expenses that have been incurred but have not been paid at the end of the accounting period
- S 6 The ability to pay current obligations
- W 7 The amount to be recovered by the company at the end of the asset's estimated useful life
- K 8 The interest cost for two or more periods when after each period, the interest of that period is added to the amount on which interest is computed in future periods
- C** P 9 The systematic and rational allocation of the acquisition cost of an intangible asset over its useful life
- I 10 A bond that may be called for early retirement at the option of the issuer
- H 11 The amount payable at the maturity of the bond and on which the periodic cash interest payments are computed
- G 12 The difference between the selling price and par when a bond is sold for more than par

Multiple Choice (3 points each) Enter your answer on the SCANTRON form.

- A 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.
 - B. To estimate the remaining useful life of the asset.
 - 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.
 - D. To estimate the current replacement cost of the asset.

- D 2. Which of the following properly describes the accounting for goodwill?
- A. Goodwill is created when it is internally generated.
 - B. Goodwill is amortized over its useful life.
 - C. Goodwill is the difference between the amounts paid for a company relative to the book value of the company's net assets.
 - ☒ (D.) Goodwill is written-down when it has been determined to be impaired.

- C 3. Which of the following statements is incorrect with respect to the sale of a depreciable asset?
- A. A gain occurs when the selling price exceeds book value.
 - B. A sale for a gain results in an increase in total assets.
 - ☒ (C.) A sale for a loss results in an increase in total assets.
 - D. A loss occurs when the selling price is less than book value.

- D 4. A company has some bottling equipment which cost \$8.5 million, has a net book value of \$4.1 million, estimated future cash flows of \$3.7 million, and a fair value of \$3.1 million. How much is the asset impairment loss?
- A. \$5.4 million
 - B. \$4.1 million
 - C. \$0.4 million
 - ☒ (D.) \$1.0 million
 - E. \$-0-, the asset is not impaired

- C 5. Schafer Company purchased a computer system on January 1, 2010, at a cash cost of \$25,000. The estimated useful life is 10 years, and the estimated residual value is \$3,000. The company will use the double declining-balance depreciation method. What is the accumulated depreciation balance as of December 31, 2011?

- A. \$4,000
 - B. \$5,000
 - ☒ (C.) \$9,000
 - D. \$10,920
- Handwritten calculations:*
- $$\frac{1}{10} \times 2 = 20\% \text{ d/b rate}$$
- $$\text{Depn. XP YR 1} = 25,000 \times 20\% = 5,000$$
- $$\text{YR 2} = (25,000 - 5,000) \times 20\% = 4,000$$

- A 6. On March 1, Wright Company purchased new equipment costing \$50,000. Cash of \$10,000 was paid at the purchase date; the balance of \$40,000 was paid one year later with interest of \$3,200. Other costs associated with the equipment were: transportation costs, \$1,000; sales tax paid \$3,000; and installation cost, \$2,500. At what amount will the equipment be recorded at on a balance sheet?

☒ A. \$56,500
☐ B. \$59,700
☐ C. \$53,500
☐ D. \$50,000

$$50,000 + 1,000 + 3,000 + 2,500 = 56,500$$

- A 7. Simon Industries purchased a large piece of equipment from Curvy Company on January 1, 2010. Simon Industries signed a note, agreeing to pay Curvy Company \$400,000 for the equipment on December 31, 2012 (a single payment of \$400,000). The market rate of interest for similar notes was 8%. The present value of \$400,000 discounted at 8% for three years was \$317,520. On January 1, 2010, Simon Industries recorded the purchase with a debit to "equipment" for \$317,520, a debit to "discount on notes payable" for \$82,480, and a credit to "notes payable" for \$400,000. On December 31, 2010, assuming no adjusting entries have been made during the year, how much interest expense would have accrued at December 31, 2010 using the effective interest method?

☒ A. \$25,402
☐ B. \$32,000
☐ C. \$29,693
☐ D. \$27,493

$$\text{Int XP} = \text{CV} \times \text{market interest rate}$$

$$317,520 \times 8\% = 25,401.60$$

- D 8. Short Company purchased land by paying \$10,000 cash on the purchase date and agreeing to pay \$20,000 for each of the next five years beginning one-year from the purchase date. Short's incremental borrowing rate is 6%. At what amount would the land be recorded on the balance sheet at the purchase date?

☐ A. \$24,946
☐ B. \$84,248
☐ C. \$110,000
☒ D. \$94,248

$$\text{Cost} = \$10,000 + \text{PV}(\$20,000/\text{yr}, n=5), \text{ where } i=6\%$$

$$\text{PV multiplier} = 4.2124 \times 20,000$$

$$= 84,248$$

$$+ 10,000$$

$$\text{Total acq cost} \quad \underline{94,248}$$

- B 9. Young Company is involved in a lawsuit. When would the lawsuit be recorded as a liability on the balance sheet?

☐ A. When the loss probability is remote and the amount can be reasonably estimated.
☒ B. When the loss is probable and the amount can be reasonably estimated.
☐ C. When the loss probability is reasonably possible and the amount can be reasonably estimated.
☐ D. When the loss is probable regardless of whether the loss can be reasonably estimated.

- B 10. Phipps Company borrowed \$25,000 cash on October 1, 2010, and signed a 9-month, 8% interest-bearing note payable with interest payable at maturity. Assuming that Phipps Company maintains its books on a calendar year, how much interest expense should be reported during 2011? (Phipps uses the accrual method of accounting.)

A. \$500
 (B) \$1,000
 C. \$2,000
 D. \$1,500

$$10/1/2010 \rightarrow 12/31/2010 = 3 \text{ mos}$$

$$1/1/2011 \rightarrow 6/30/2011 = 6 \text{ mos}$$

$$2011 \text{ Int XP} = \$25,000 \times 8\% \times 6/12 = \underline{\underline{\$1,000}}$$

- A 11. Rodgers Company reported the following selected data in its financial statements for the three years ended December 31, 2012:

	In millions \$		
	12-31-2012	12-31-2011	12-31-2010
Accounts receivable	96	79	60
Accounts payable	325	391	430
Sales, net	1,600	1,440	1,200
Cost of goods sold	960	980	816
Operating income	240	202	162

What was Rodgers's accounts payable turnover ratio in 2012?

(A) 2.68
 B. 0.37
 C. 2.51
 D. 2.71

$$\begin{aligned} \text{A/P TO} &= \text{COGS} \div \text{Average A/P} \\ &= 960 \div [(325 + 391) \div 2] \\ &= 960 \div 358 \\ &= 2.68 \end{aligned}$$

- C 12. Hanson Company's payroll records revealed the following with respect to the company's pay period ended October 31, 2013:

Gross amount of salaries and wages.....\$235,000
 Federal and state income taxes withheld35,250
 Employer portion of social security tax.....17,980
 Employee portion of social security tax.....17,980
 Federal unemployment tax liability (FUTA)7,050

The net salary (cash) paid to the employees of Hanson Company for the pay period ended October 31 was:

A. \$217,020
 B. \$199,750
 (C) \$181,770
 D. \$174,720

$$\begin{aligned} &\text{Gross} && 235,000 \\ &- \text{Tax W/H} && 35,250 \\ &- \text{FICA W/H} && 17,980 \\ &\hline &\text{Net} && \underline{\underline{181,770}} \end{aligned}$$

B 13. The quick ratio (quick assets ÷ current liabilities) is used to measure liquidity. Which of the following accounts would not be considered when calculating the quick ratio?

- A. Marketable securities.
- ☒ B. Inventory. *Not a quick asset*
- C. Accounts receivable.
- D. Taxes payable.

D 14. Which of the following is not an advantage of issuing bonds versus issuing stock to finance expansion?

- A. Stockholders remain in control as bondholders cannot vote or share in the company's earnings.
- B. Interest expense is tax deductible but dividends are not.
- C. Money can usually be borrowed at a lower rate and then invested to earn a higher return on assets.
- ☒ D. The fixed payment dates for the interest and maturity value.

B 15. Which of the following statements does not correctly describe the accounting for bonds that were issued at their maturity value?

- A. The market rate of interest equals the stated interest rate.
- ☒ B. The book value of the bond liability decreases when interest payments are made on the due dates.
- C. The interest expense over the life of the bonds will equal the cash interest payments.
- D. The present value of the bonds' future cash flows equals the bonds' maturity value.

C 16. Which of the following statements correctly describes the accounting for bonds that were issued at a discount?

- A. The market rate of interest is less than the stated interest rate.
- B. The present value of the bonds' future cash flows is greater than the bonds' maturity value.
- ☒ C. The carrying value of the bond liability increases when interest payments are made on the due dates.
- D. The interest expense over the life of the bonds will be less than the cash interest payments.

- A 17. KAT Company issues \$250,000 of bonds with a coupon or stated rate of 6%. The bonds were priced to yield the market rate of 8%. The bonds mature in 5 years and pay interest every six months. What is the amount of cash that KAT received from the bond issue? (Round all computations to the nearest dollar \$.)

- A. \$229,732
B. \$250,000
C. \$200,095
D. \$238,864

ult rate = 8% Multipliers based on $i = 4\%$
 $n = 10$

$$PV \text{ of } \$250,000 = 250,000 \times .6756 = 168,900$$

$$PV \text{ of } \$7500/\text{per.} = 7500 \times 8.1109 = 60,831.75$$

$$\underline{\underline{229,731.75}}$$

$$\begin{array}{r} 250,000 \\ \times 6\% \\ \times \frac{1}{2} \\ \hline 7,500 \end{array}$$

- D 18. When bonds with a face value of \$10,000,000 have a 2% stated rate of interest are issued at \$8,365,140, the journal entry to record the transaction would be:

- A. Cash 8,365,140
Interest payable 1,634,860
Bonds payable 10,000,000
- B. Cash 8,365,140
Premium on bonds payable 1,634,860
Bonds payable 10,000,000
- C. Bonds payable 10,000,000
Premium on bonds payable 1,634,860
Cash 8,365,140
- D. Cash 8,365,140
Discount on bonds payable 1,634,860
Bonds payable 10,000,000



Problem 1 (18 points)

The City of Atlanta issued bonds on January 1, 2013, with a maturity value of 400,000 to finance road improvements. The bonds have a stated interest rate of 5%, but were sold to investors to yield a market rate of 4%. The bonds mature in 10 years and pay interest every six months (semi-annually). The bond proceeds received by the City of Atlanta totaled \$432,714.

Required:

1. Complete the bond amortization table below for the first two payments.
2. Show the journal entry to record the second payment.

Date	<i>2 1/2% x Face</i> Cash payment	<i>2% x CV</i> Interest expense	<i>Cash - Int</i> Amortization	Carrying value
1/1/2013	NA	NA	NA	432,714
6/30/2013	10,000	8,654.28	1,345.72	431,368.28
12/31/2013	10,000	8,627.37	1,372.63	429,995.65

+ 8 pts

+ 4 pts

Journal entry to record second payment on December 31, 2013:

ACCOUNT	DEBIT	CREDIT
<i>Interest expense</i>	8,627.37	
<i>Premium on bonds payable</i>	1,372.63	
<i>Cash</i>		10,000

+ 2 pts

+ 2

+ 2

18 pts

¹⁵
Problem 2 (17 points) – You must show your work to receive full credit for a correct answer.

Milton Company purchased a pickup truck to use in its construction business. The truck cost \$24,000. Milton uses the straight-line method of depreciation, and it assumed that the truck would have a useful life of 3 years, and a residual value of \$3,000. At the end of two years, Milton sold the truck and planned to replace it with a larger one. Milton sold the truck at the end of two years for \$8,000.

Required (Enter your answers in the space provided. Show your work at the bottom of the page.)

1. Compute depreciation expense for year 1 and 2.

Depreciation expense year 1: $(24,000 - 3,000) \div 3 = \$7,000$

Depreciation expense year 2: $\$7,000$

+ 4 pt

2. Determine the gain or loss on sale of the truck at the end of year 2. Clearly indicate both the amount and whether the amount represents gain or (loss).

Gain or (Loss): $8,000 - (24,000 - 14,000) = (2,000)$ loss

+ 3 pt

3. Show the journal entry necessary to record the sale of the truck at the end of year 2.

ACCOUNT	DEBIT	CREDIT
Cash	8,000	
Accumulated depr.	14,000	
Loss on sale	2,000	
Truck - Asset		24,000

+ 2

+ 2

+ 2

+ 2

15 pt