

Mid-Term Exam I (Sample)

Part I: Multiple Choices (2 points for each question, 42 points in total)

1. On January 1, 2020, Howard Company, a calendar-year company, issued \$1,000,000 of notes payable, of which \$250,000 is due on January 1 for each of the next four years. The proper statement of financial position presentation on December 31, 2020, is
 - A) Current Liabilities, \$800,000.
 - B) Long-term Debt, \$800,000.
 - C) Current Liabilities, \$200,000; Long-term Debt, \$600,000.
 - D) Current Liabilities, \$250,000; Long-term Debt, \$750,000.

2. The balance in the Accumulated Depreciation account represents the
 - A) cash fund to be used to replace plant assets.
 - B) amount to be deducted from the cost of the plant asset to arrive at its fair value.
 - C) amount charged to expense in the current period.
 - D) amount charged to expense since the acquisition of the plant asset.

3. Intangible assets
 - A) should be reported under the heading Property, Plant, and Equipment.
 - B) are not reported on the statement of financial position because they lack physical substance.
 - C) should be reported as Current Assets on the statement of financial position.
 - D) should be reported as a separate classification on the statement of financial position.

4. Which of the following statement regarding depreciation is true?
 - A) Depreciation is a process of asset valuation, not cost allocation.
 - B) Three factors affect the computation of depreciation: cost, useful life, and residual value.
 - C) Depreciation expense and accumulated depreciation are reported on the income statement.
 - D) Depreciation applies to three classes of plant assets: land, buildings, and equipment.

5. On October 1, 2020, Pennington Company issued a €40,000, 10%, nine-month interest-bearing note. Assuming interest was accrued in June 30, 2021, the entry to record the payment of the note on July 1, 2021, will include a:

- A) debit to Interest Expense of €1,000.
- B) credit to Cash of €40,000
- C) debit to Interest Payable of €3,000.
- D) debit to Notes Payable of \$43,000.

6. Knupp Electric began operations in 2020 and provides a one year warranty on the curling irons it sells. They estimate that 4,000 of the 120,000 curling irons sold in 2020 will be returned for repairs and that these repairs will cost \$4 per unit. The cost of repairing 3,000 curling irons sold in 2020 presented for service in 2020 was \$15,000. Carter should report:

- A) warranty expense of \$16,000 for 2020.
- B) warranty expense of \$4,000 for 2020.
- C) estimated warranty liability of \$16,000 on December 31, 2020.
- D) no warranty obligation on December 31, 2012, since this is only a contingent liability.

7. Tanner Company purchased a building during 2016 for \$600,000. From 2016 to 2018, \$240,000 of depreciation was recorded. The current net fair value is \$350,000 and the value in use is \$370,000. The amount of impairment that should be recognized is

- A) \$0
- B) \$40,000
- C) \$80,000
- D) \$240,000

8. Tainan company decides to exchange its old machine and \$2,600,000 cash for a new machine. The old machine has a book value of \$1,400,000 and a fair value of \$2,400,000 on the date of the exchange. If this transaction has commercial substance, the cost of the new machine would be recorded at

- A) \$4,000,000
- B) \$2,600,000
- C) \$5,000,000
- D) cannot be determined

9. Becky Sherrick SE has total proceeds from sales of €4,410. If the proceeds include sales taxes of 5%, the amount to be credited to Sales Revenue is:

- A) \$4,000
- B) \$4,300
- C) \$4,200
- D) \$4,630.5

10. During 2027, Roots Corporation reported net sales of \$2,250,000, net income of \$1,440,000, and depreciation expense of \$120,000. Roots also reported beginning total assets of \$1,000,000, ending total assets of \$1,500,000, plant assets of \$960,000, and accumulated depreciation of \$600,000. Roots's asset turnover ratio is

- A) 3.5 times.
- B) 2.8 times.
- C) 2.3 times.
- D) 1.8 times.

11. Bonds usually sell at a discount when

- A) Investors are willing to invest in the bonds at the stated interest rate
- B) Investors are willing to invest in the bonds at rates that are lower than the stated interest rate
- C) Investors are willing to invest in the bonds only at rates that are higher than the stated interest rate
- D) A capital gain is expected

12. In a recent year Hill Corporation had net income of \$130,000, interest expense of \$20,000, and tax expense of \$40,000. What was Hill Corporation's times interest earned for the year?

- A) 7.5
- B) 8.5
- C) 9.5
- D) 6.5

13. Sensible Insurance collected a premium of £24,000 for a 1-year insurance policy on April 1. What amount should Sensible report as a current liability for Unearned Service Revenue at December 31?
- A) £0.
 - B) £4,500.
 - C) £6,000.
 - D) £18,000.
14. Which of the following statements concerning current liabilities is **incorrect**?
- A) Current liabilities does not include unearned revenues.
 - B) A company that has more current liabilities than current assets may have liquidity issues.
 - C) Current liabilities include current portion of long-term debt.
 - D) A current liability is a debt that a company expects to pay within one year or the operating cycle whichever is longer.
15. Salem Company hired Kirk Construction to construct an office building for £11,200,000 which Salem Company owned. The building was complete and ready to be used on January 1, 2020 and it has a useful life of 40 years. The price of the building included land improvements costing £850,000 and property costing £1,050,000. The useful lives of the land improvements and the personal property are 10 years and 5 years, respectively. Salem Company uses component depreciation, and the company uses straight-line depreciation for other similar assets. What total amount of depreciation expense would Salem Company report on its income statement for the year ended December 31, 2020?
- A) £469,000
 - B) £527,500
 - C) £596,750
 - D) £526,750
16. The gross pay for all employees is debited to
- A) Salaries Payable
 - B) Salaries Expense
 - C) Payroll Tax Expense
 - D) Cash

17. Which of the following expenditures should be expensed in the year incurred?
- A) Equipment
 - B) Prepaid rent
 - C) Research and development cost incurred before technological feasibility is achieved
 - D) Inventory
18. LaFluer Corporation issued \$400,000 of 15-year bonds on January 1. The bonds pay interest on January 1 and July 1 with a stated rate of 8 percent. If the market rate of interest at the time the bonds are sold is 6 percent, what will be the issuance price (approximate) of the bonds?
- A) \$462,339
 - B) \$478,406
 - C) \$400,005
 - D) \$385,246
19. Disney is the defendant in a salary-discrimination lawsuit for \$10 million. The company's lawyers believe there is a 95 percent probability that Disney will lose the case and that the loss will more than likely be \$9 million. Indicate the appropriate accounting treatment for the above situation.
- A) No information need be disclosed in the notes to the financial statements.
 - B) Require to disclose in the footnote.
 - C) The liability and associated loss should be formally recognized in the financial statement.
 - D) Cannot be determined.
20. Grammar Company is being accused of fraudulent reporting. The company's lawyers believe there is a 45 percent chance of losing the case. Indicate the appropriate accounting treatment for the above situation.
- A) No information need be disclosed in the notes to the financial statements.
 - B) Require to disclose in the footnote.
 - C) The liability and associated loss should be formally recognized in the financial statement.
 - D) cannot be determined.

21. A depreciable asset's carrying amount can never be less than its
- A) Historical cost
 - B) Fair market value
 - C) Capitalized cost
 - D) Salvage value

Part II: Problems (61 points in total)

1.

On January 1 2017, AE Co. purchased a new airplane. The following costs are related to the purchase:

Airplane, base price	\$112,000
Cash discount	3,000
Sales tax	2,000
Delivery charges	1,000

Instructions:

- (a) Prepare the journal entry to record the payment of these items on January 1, 2017. (2 points)
- (b) Ignore your answer to part (a) and assume that the airplane cost \$90,000 and has an expected useful life of 5 years or 1,500 hours. The estimated salvage value is 3,000. Using units-of-production depreciation and assuming that 315 hours are flown in 2018, calculate the amount of depreciation expense to be recorded for the year of 2018. (2 points)
- (c) Using the information in part (b) and assume that the company uses double declining balance depreciation method, calculate the amount of depreciation expense to be recorded for the year of 2018. (2 points)
- (d) According to your calculation from part (b) and (c), all else being equal, compare the units-of-production and the double declining balance depreciation method, which method results in lower income tax expense for the year of 2018? (2 points)
- (e) Ignore the information in parts (a) through parts (d) and assume that the airplane costs \$90,000, that its expected useful life is 5 years, and that its estimated salvage value is 5,000. The company now uses the straight-line depreciation method. On **January 1, 2020**, the following balances are in the related accounts: (4 points)

Airplane	\$90,000
<u>Accumulated Depreciation, Airplane</u>	<u>51,000</u>

Prepare the necessary journal entries to record the sale of this airplane on **July 1, 2020**, for \$40,000.

- (f) The airline industry was hit particularly hard after the 9/11 attacks on the World Trade Center in 2001. In 2002, Southwest Airlines, one of the healthier airline companies, decided to lengthen the useful lives of its aircraft from 22 to 27 years. Shortly thereafter, following Southwest's lead, other airlines made the same move.

What advantage, if any, did the airlines gain by making this change in estimate? Would it have changed earnings, and if it did, would the change have been favorable or negative? (3 points)

2. Clarion Constructors completed the following transactions and events involving the operation of loader (an equipment) in its business. (6 points)

2020

Jan. 3 Paid \$3,660 to enclose the cab and install air conditioning in the loader to enable operations under harsher conditions. This increased the estimated residual value of the loader. (2 points)

2021

Jan. 1 Paid \$4,500 to overhaul the loader's engine, which increased the loader's estimated useful life by two years. (2 points)

Feb. 17 Paid \$920 to repair the loader after the operator backed it into a tree. (2 points)

Required

Prepare journal entries to record these transactions and events.

3.

At the beginning of the fiscal year, Natalie Company purchased for \$1,030,000 a patent that applies to the manufacture of a unique tamperproof lid for medicine bottles. Natalie incurred legal costs of \$450,000 in successfully defending use of the lid by a competitor. Natalie estimated that winning the lawsuit provides future economic benefit and the patent would be valuable for at least 10 years. During the first two years of operations, Natalie successfully marketed the lid. (6 points)

Instructions:

Prepare journal entries to record the following: (a) purchase of the patent (b) successful defense of the patent (c) amortization expense for the first year.

4.

Assume that the business tax rate is 5% on both purchase and sale transactions. On March 23, 2021, AE Co. acquires from BA Co. 20 iPhones for NT\$400,000. On April 10, AE Co. sold all iPhones to customers for NT\$500,000. On April 30, AE pays VAT (Value-Added Tax) to the government.

Instructions:

Prepare journal entries regarding VAT for AE Co.'s purchase on March 23, sale transaction on April 10, accrue business tax payable, and the payment of business taxes to the government on April 30. (8 points)

5.

On July 1, 2020, Dacotah Chemical Company issued \$4,000,000 face value, 10%, 10-year bonds at \$4,543,627. This price resulted in an 8% effective-interest rate on the bonds. Dacotah uses the effective-interest method to amortize bond premium or discount. The bonds pay semiannual interest on each July 1 and January 1.

Instructions

(Round all computations to the nearest dollar.)

(a) Prepare the journal entries to record the following transactions. (8 points)

(1) The issuance of the bonds on July 1, 2020.

(2) The accrual of interest and the amortization of the premium on December 31, 2020.

(3) The payment of interest and the amortization of the premium on July 1, 2021, assuming no accrual of interest on June 30.

(4) The accrual of interest and the amortization of the premium on December 31, 2021.

(b) Show the proper presentation for the liability for bonds payable on the December 31, 2021, statement of financial position. (2 points)

(c) Provide the answers to the following questions in letter form. (6 points)

(1) What amount of interest expense is reported for 2021?

(2) Would the bond interest expense reported in 2021 be the same as, greater than, or less than the amount that would be reported if the bonds were issued at face value?

(3) Determine the total cost of borrowing over the life of the bond.

6.

Downey Corporation issues a £500,000, 6%, 10-year mortgage note payable on December 31, 2020, to obtain needed financing for the construction of a building addition. The terms provide for annual installment payments of £67,934 on December 31.

Instructions

- (a) Prepare the journal entries to record the mortgage loan on December 31, 2020, and the first installment payment.(4 points)
- (b) Will the amount of principal reduction in the second installment payment be more or less than with the first installment payment? (2 points)

7.

Presented below are three independent situations:

- (a) Strike Corporation purchased \$350,000 of its bonds on June 30, 2020, at 102 and immediately retired them. The carrying value of the bonds on the retirement date was \$339,500. The bonds pay semiannual interest and the interest payment due on June 30, 2020, has been made and recorded.
- (b) Worton, Inc. purchased \$400,000 of its bonds at 97 on June 30, 2020, and immediately retired them. The carrying value of the bonds on the retirement date was \$393,000. The bonds pay semiannual interest and the interest payment due on June 30, 2020, has been made and recorded.

Instructions

For each of the independent situations, prepare the journal entry to record the retirement of the bonds. (4 points)

Answer key:

I. Multiple choice questions:

1	2	3	4	5
D	D	D	B	C
6	7	8	9	10
A	A	C	C	D
11	12	13	14	15
C	C	C	A	B
16	17	18	19	20
B	C	B	C	B
21				
D				

II. Problems:

(P1)

a. 2017

Jan. 2 Airplane..... 112,000
 Cash..... 112,000
 Purchased airplane (\$112,000 – \$3,000 + \$2,000 + \$1,000).

b. Units-of-production method

$$\frac{\$90,000 - \$3,000}{1,500 \text{ hours}} = \$58 \text{ per hour; } \$58 \times 315 \text{ hours} = \$18,270$$

c.

2017 $\$90,000 \times 1/5 \times 2 = \$36,000$

2018 $(\$90,000 - \$36,000) \times 1/5 \times 2 = \$21,600$

d. Double declining balance method results in lower income tax expense in 2018 because the company reports higher depreciation expense in 2018.

e. 2020

July 1 Depreciation Expense..... 8,500
 Accumulated Depreciation, Airplane 8,500
 To record depreciation expense for the period from January 1, 2020, to July 1, 2020, bringing depreciation up to date before recording the sale of the airplane ($\$17,000 \times 1/2$ year).

Note: No depreciation has yet been recorded for 2020, which is now recorded by this entry $(\$90,000 - \$5,000) \times 1/5 \times 1/2 \text{ year} = \$8,500$.

July 1	Cash	40,000	
	Accumulated Depreciation, Airplane.....	59,500	
	Airplane		90,000
	Gain on Sale of Airplane		9,500
<i>Sold airplane for \$40,000 cash on July 1, 2020.</i>			

f. The advantage to the airlines of increasing the useful life of aircraft is that the annual depreciation charge will decrease. This will serve to increase earnings or reduce losses of airlines.

(P2)

2020

Jan. 3	Equipment.....	3,660	
	Cash.....		3,660
<i>To record expenditure which increases useful life of loader.</i>			

2021

Jan. 1	Equipment.....	4,500	
	Cash.....		4,500
<i>To record repairs which increase useful life.</i>			
Feb. 17	Repairs Expense—Equipment.....	920	
	Cash.....		920
<i>To record ordinary repair on loader.</i>			

(P3)

(a) Patent	1,030,000	
Cash		1,030,000
To record purchase of patent		
(b) Patent	450,000	
Cash		450,000
Successful defense of patent		
(c) Amortization Expense	148,000	
Patent		148,000
Annual amortization of patent		
$\$1,480,000 / 10 \text{ years} = 148,000$		

(P4)

1.

March 23	Inventory.....	400,000	
	Input tax	20,000	
	Cash (or Accounts payable)		420,000
April 10	Cash (or Accounts Receivable)	525,000	
	Sales Revenue.....		500,000
	Output tax		25,000
	Output tax	25,000	
	Input tax		20,000
	Business tax payable		5,000
April 30	Business tax payable.....	5,000	
	Cash		5,000

(P5)

(a)	(1)		2020	
	July	1	Cash	4,543,627
			Bonds Payable.....	4,543,627
	(2)	Dec. 31	Interest Expense	
			(\$4,543,627 X 4%).....	181,745
			Bonds Payable.....	18,255
			Interest Payable	
			(\$4,000,000 X 5%)	200,000
	(3)		2021	
	July	1	Interest Expense	
			[(\$4,543,627 – \$18,255) X 4%]	181,015
			Bonds Payable	18,985
			Cash	200,000
	(4)	Dec. 31	Interest Expense	
			[(\$4,525,372 – \$18,985) X 4%]	180,255
			Bonds Payable	19,745

Interest Payable.....	200,000
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(b) Bonds payable4,486,642*

*($\$4,543,627 - \$18,255 - \$18,985 - \$19,745$)

(c) (1) The amount of interest expense reported for 2021 related to these bonds is \$361,270 ($\$181,015 + \$180,255$).

(2) When the bonds are sold at a premium, each semiannual interest expense related to the bond will be less than when the bonds are sold at face value. Therefore, the bond interest expense reported in 2021 would be less than the amount that would be reported if the bonds were issued at face value.

(3) The total cost of borrowing is as shown below:

Semiannual interest payments	
$(\$4,000,000 \times 10\% \times 1/2) = \$200,000 \times 20$	\$4,000,000
Less: Bond premium ($\$4,543,627 - \$4,000,000$) .	<u>543,627</u>
Total cost of borrowing	<u>\$3,456,373</u>

(P6)

(a) Dec. 31	Cash.....	500,000
	Mortgage Payable	500,000

Dec. 31	Interest Expense.....	30,000
	Mortgage Payable	37,934
	Cash.....	67,934
	$(\$500,000 \times 6\% = \$30,000)$	

(b) The amount of principal reduction will increase with each installment payment.

(P7)

(a) June 30	Bonds Payable	339,500
	Loss on Bond Redemption.....	17,500
	Cash.....	357,000
	$(\$350,000 \times 102\% = \$357,000)$	

(b)	June	30	Bonds Payable	393,000	
			Gain on Bond Redemption.....		5,000
			Cash.....		388,000
			(\$400,000 × 97% = \$388,000)		