NATIONAL UNIVERSITY OF SINGAPORE
NUS Business School
Department of Accounting

ACC1701X ACCOUNTING FOR DECISION MAKERS
Semester 1, 2022/23

MOCK EXAM #3 – Answer Solutions
(with additional explanations for some questions)

MCQ:

Question #: 1
Which of the following is the reason that the accounting equation is true by definition?

A. Liabilities are the source that funds the purchase of assets
B. Assets are the source that funds the purchase of liabilities and equity
✓C. Liabilities and equity are the sources that fund the purchase of assets
D. None of these are true, the accounting equation is merely a coincidence

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Question #: 2
The transactions carried out by Blue Hoops Corporation during the year caused an increase in total assets of $25,650 and a decrease in total liabilities of $12,250. If no additional stock was issued during the year and dividends of $7,850 were paid, what was the net income for the year?

A. $53,600
✓B. $45,750
C. $29,100
D. $13,400

Equity = Assets - Liabilities
Increase in Equity: $25,650 - (-$12,250) = $37,900
Net income: $37,900 = x - $7,850
x = $45,750

Question #: 3
The adjusted account balances as of December 31, 2022 that were taken from the Adjusted Trial Balance of Yumi Corporation are as follows:

	Debit	Credit
Cash	$300	
Prepaid Rent	100	
Store Supplies	600	
Unearned Service Fees Revenue		360
Accounts Payable		140

	Debit	Credit
Retained Earnings		100
Dividends	?	
Service Fees Revenue		$1,450
Wage Expense	400	
Store Supplies Expense	100	
Rent Expense	150	

Given the information above, after all closing entries have been made, the balance in Yumi‘s Retained Earnings account was $500, how much of dividends were distributed in 2022?

A. $200
B. $300
✓C. $400
D. $500

Net income: $1,450 - $400 - $100 - $150 = $800
Dividends: $100 + $800 - $500 = $400

Question #: 4
On 2nd October 2021, Tessila Car Service accepted a 120 days, $900,000, 10% note from First Auto Co. Tessila Car Service is on the calendar fiscal year. If First Auto Co. paid the note and the interests on the due date of the note, the entry made by Tessila Car Service on the note's due date is:

A. Dr Cash $930,000
Cr Notes Receivable $930,000
✓B. Dr Cash $930,000
Cr Notes Receivable $900,000
Cr Interest Receivable $ 22,500
Cr Interest Revenue $ 7,500

C. Dr Cash $900,000
Cr Notes Receivable $900,000
D. Dr Cash $930,000
Cr Notes Receivable $900,000
Cr Interest Revenue $ 30,000

Daily interest rate = 900,000 x 10% / 360 = 250
Interest income 2021= 250 x 90 (29 +30 +31) days = 22,500
Interest income 2022 = 250 x 30 = 7,500
Total cash = 900k + 22.5k + 7.5k = 930k

Question #: 5
Under the periodic inventory system, if an inventory purchase has been made (FOB shipping point) and recorded

but has NOT yet arrived (and thus is not counted), the financial statements will

A. Overstate assets
B. Overstate net income
✓C. Understate net income
D. Understate revenues

Question #: 6
Boogie Shoes Co. had the following inventory records for one line of its dancing shoes for the month of January:

Beginning inventory	70 pairs @ $100 per pair
Sales, Jan. 1 - Jan. 7	50 pairs
Purchase, Jan. 8	46 pairs @ $104 per pair
Sales, Jan. 9 - 16	59 pairs
Purchase, Jan. 17	62 pairs @ $110 per pair
Sales, Jan. 18 - 29	56 pairs
Purchase, Jan. 30	18 pairs @ $112 per pair

Assuming the perpetual FIFO inventory method is used, what is the cost of Boogie Shoes Co.'s ending inventory?

A. $3,000
✓B. $3,446
C. $3,276
D. $3,546

FIFO Cost of ending inventory:

18 × $112	*$2,016*
13 × $110	*1,430*
	$3,446

Question #: 7
Which inventory cost method will provide the same amounts for ending inventory and cost of goods sold under both the periodic and perpetual inventory systems?

✓A. FIFO
B. LIFO
C. Weighted average cost
D. None of the above

Question #: 8
Maggie Company normally sells its product for $20 per unit. However, the selling price has fallen to $15 per unit. Maggie's current inventory consists of 200 units purchased at $16 per unit. Net realizable value has now fallen to $13 per unit. Calculate the amount of inventory that Maggie Company will have to report.

A. $2,550

✓ B. $2,600

B. $2,700

C. $3,000

200 units @ $13 per unit = $2,600

Question #: 9
In preparing its bank reconciliation for the month of July, Jin &Sugar Company has available the following information:

Balance per July's bank statement	$20,025
Deposit in transit	3,125
Outstanding checks	2,875
Check erroneously deducted by bank from Jin & Sugar's account	25
Bank service charges for July	30

What is Jin &Sugar's adjusted cash balance for July?

A. $19,800

B. $20,025

C. $20,275

✓D. $20,300

Cash balance: $20,025 + $3,125 – $2,875 + $25 = $20,300

Question #: 10
Valkyrie Safe Company is on the periodic inventory system. The following information appears in Valkyrie's records for the year ended December 31:

Inventory, January 1	$ 325,000
Purchases	1,150,000
Purchase returns	40,000
Freight in	30,000
Sales	1,700,000
Sales discounts	25,000

On December 31, a physical inventory revealed that the ending inventory was only $210,000. Valkyrie's gross profit margin on net sales has remained constant at 30% in recent years. Valkyrie suspects that some of its inventory may have been stolen by one of the company's employees. At December 31, what is the estimated cost of the missing inventory?

A. $75,000

✓B. $82,500

C. $210,000

D. $292,500

Cost of goods available for sale: *$325,000 + $1,150,000 – $40,000 + $30,000*

	= $1,465,000
Estimated gross margin:	*$(1,700,000 – $25,000) × 30% = $502,500*
Estimated cost of goods sold:	*$1,675,000 – $502,500 = $1,172,500*
Estimated ending inventory:	*$1,465,000 – $1,172,500 = $292,500*
Estimated missing inventory:	*$292,500 – $210,000 = $82,500*

Question #: 11

Wangdi company sells computers at a selling price of ¥3,500 each. Each computer has a 2 years warranty that covers replacement of defective parts. It is estimated that 1% of all computers sold will be returned under the warranty at an average cost of ¥230 each.

During November, the company sold 40,000 computers, and 500 computers were serviced under the warranty at a total cost of ¥60,000. The beginning balance in the Warranty Provision account at November 1 was ¥45,000. What is the ending balance in the Warranty Provision account at November 30?

A. ¥92,000

B. ¥105,000

✓C. ¥77,000

D. ¥160,000

Warranty expense = (40,000 x 1% x 230) = 92,000

Beg warranty provision 45k + 92k expense – 60,000 actual warranty = End 77,000

Question #: 12

SamSun Manufacturing Company purchased a new machine on July 1, 2021. It was expected to produce 200,000 units of solar-powered mini fans over its estimated useful life of eight years. Total cost of the machine was $600,000, and salvage value was estimated to be $60,000. Actual units produced by the machine in 2021 and 2022 are shown below:

2021	16,000 units
2022	30,000 units

SamSun reports on a calendar-year basis and uses the units-of-production method of depreciation. The amount of depreciation expense for this machine in 2022 would be:

A. $124,200

B. $90,000

✓C. $81,000

D. $74,520

Depreciation expense 2022: [($600,000 □ $60,000) □ 200,000] □ 30,000 = $81,000

Question #: 13

Poppin-C &Co purchased a machine on 1st January 2021, for $57,600 cash. The machine has an estimated useful life of 8 years and a salvage value of $15,040. Poppin-C uses the double declining-balance method of depreciation for all its assets. What will be the machine's carrying amount as of 31st December 2022?

A. $10,800

✓B. $32,400

C. $43,200

D. $14,400

Annual depreciation rate:	*1/8 × 2 = 25%*
Depreciation expense 2021:	*$57,600 × 25% = $14,400*
Depreciation expense 2022:	*($57,600 – $14,400) × 25% = $10,800*
Carrying amount December 31, 2022:	*$57,600 – $14,400 – $10,800 = $32,400*

Question #: 14

Poppin-C &Co purchased a machine on 1st January 2021, for $57,600 cash. The machine has an estimated useful life of 8 years and a salvage value of $15,040. Poppin-C uses the double declining-balance method of depreciation for all its assets.

On 1st January 2023, Poppin-C spent $17,000 to overhaul the machine, which increased its remaining useful life to 9 years. Salvage value of the machine remains unchanged. Poppin-C also changed its depreciation method to a straight-line basis for all its assets. How much depreciation expense should Poppin-C record in 2023 for this machine (round your answer to the nearest dollar)?

A. $4,909

✓B. $3,818

C. $5,956

D. $5,489

Carrying amount Dec 31, 2022 = 32,400

Revised carrying amount = 32,400 + 17,000 = 49,400

Depreciation exp 2023 = (49,400 – 15,040) /9 = 3,818

Question #: 15

When Grub Corporation bought Ober Inc., included in the purchase price was a patent valued at $26,000. The patent still has 10 years remaining of its legal life. However, it is estimated that the useful life of the patent is only 8 years. The journal entry to record the annual patent amortization expense would include a

A. Debit to Amortization Expense for $2,600

B. Credit to Patent for $2,600

✓C. Debit to Amortization Expense for $3,250

D. Debit to Patent for $3,250

Amortization expense: $26,000 / 8 = $3,250

Question #: 16

The Swab Company purchased a machine on 1st November 2013, for $148,000. At the time of acquisition, the machine was estimated to have a useful life of 10 years and a salvage value of $4,000. Swab recorded monthly depreciation using the straight-line method. On 1st July 2022, the machine was sold for $13,000. What should be the loss recognized from the sale of the machine?

A. $4,000
B. $5,000
✓C. $10,200
D. $13,000

Annual depreciation expense:	*($148,000 – $4,000) ÷ 10 = $14,400*
Carrying amount on July 1, 2022:	*$148,000 – [($14,400 × 8) + ($14,400 × 8/12)] = $23,200*
Loss on machine:	*$23,200 – $13,000 = $10,200*

Question #: 17
R&M Corporation and V-Hope Corporation are competitors. For the fiscal year 2022, a DuPont analysis of both companies shows that they are comparable in terms of profitability and efficiency. However, VHope's ROE is almost double that of R&M's ROE. Which of the following statements is true?

✓A. V-Hope is a much more highly leveraged company than R&M.
B. V-Hope is not as highly leveraged as R&M.
C. V-Hope's net income is double that of R&M's net income.
D. V-Hope's average total equity is less than R&M's average total equity.

Question #: 18
Which of the following transactions could increase a firm's current ratio?

A. Purchase of inventory for cash
✓B. Payment of accounts payable
C. Collection of accounts receivable
D. Purchase of temporary investments for cash

Question #: 19
Fangs Family Corporation reported net income of $45,000 for the year ended 31st December 2022. During the year, inventories decreased by $6,000, accounts payable decreased by $9,000, depreciation expense was $10,000 and a gain on disposal of equipment of $4,500 was recorded. Net cash provided by operating activities in 2022 using the indirect method was:

A. $74,500
✓B. $47,500
C. $53,500
D. $42,500

Net cash provided by operating activities = $45,000 + $6,000 - $9,000 + $10,000 - $4,500 = $47,500

Question #: 20

HaiShi Company had the following transactions during 2022:

i. Issued $50,000 of par value ordinary shares for cash.

ii. Repaid a 8 year long-term note payable in the amount of $22,000.

iii. Acquired land by issuing ordinary shares of par value $100,000.

iv. Declared and paid a cash dividend of $2,000.

v. Sold an equipment for cash of $6,000.

vi. Acquired a new building for cash of $12,000.

What is the net cash flow from investing activities?

A. $12,000
B. $32,000
✓C. ($6,000)
D. $6,000

Inflow from PPE disposal $6,000 – outflow from building acquisition $12,000 = ($6,000) net outflow
Note that transactions i, ii, and iv are financing activities, while transaction iii is a non-cash activity.

Essays:

Essay Question #1:

METAVurse Inc.'s Statement of Comprehensive Income and the Statement of Financial Position for the fiscal year ended **31st December 2021** are shown below:

METAVurse Inc.
Statement of Comprehensive Income
For the Year Ended 31 December 2021

Sales Revenue	$ 900,000
Cost of Goods Sold	(500,000)
Gross Profit	**400,000**
Salaries Expense	(148,500)
General Admin Expense	(100,000)
Rent Expense	(45,000)
Depreciation Expense	(70,000)
Bad Debt Expense	(2,200)
Operating Income	**34,300**
Interest Expense	(2,000)
Income before Income Tax	**32,300**
Income Tax Expense	(1,800)
Net Income	**30,500**
OCI	-
Net Comprehensive Income	**30,500**

METAVurse Inc.
Statement of Financial Position
As at 31 December 2021

Assets	
Current Assets:	
Cash	$ 165,000
Accounts Receivable	75,000
Less: Allowance for Bad Debts	(4,000)
Merchandise Inventory	50,000
Non-current Assets:	
PPE	750,000
Less: Accumulated Depreciation	(250,000)
Total Assets	**786,000**
Liabilities	
Accounts Payable	90,000
Income Tax Payable	900
Short Terms Notes Payable	20,000
Total Liabilities	110,900
Equity	
Share Capital	535,000
Retained earnings	140,100
Total Stockholders' Equity	675,100
Total Liabilities & Stockholder's Equity	**786,000**

During the end of the year audit, METAVurse's auditors Earnest &Coopers discovered the following errors:

(a) On 1st Nov, METAVurse made a rent payment of $18,000 in cash for six months rent. However, the full amount of $18,000 was recognized as rent expense on 1st Nov. No adjusting entries were made to rent expense at year end.

(b) METAVurse pays its employees on the first of every month for salaries relating to the prior month before. No adjusting entry was made for December 2021 salaries of $13,500 that will be paid on 1st January, 2022

(c) METAVurse uses the allowance method of accounting for uncollectible accounts. It did not write off any accounts during the fiscal year 2021. As at 31st December 2021, its aged list of Accounts Receivable is as shown below:

	Number of Days Unpaid			
Total Accounts Receivable	0 - 30	31 - 60	61 –90	>90
$75,000	$50,000	$10,000	$10,000	$5,000
Estimated Uncollectible %	1%	5%	15%	30%

On 5th Dec, one of METAVurse's customer Rublox Co. informed METAVurse that it had gone bankrupt and will not be able to pay its outstanding receivable account of $5,000, which was already more than 180 days past due as of 5th Dec. Earnest &Coopers advises METAVurse that Rublox's receivable account must be written off.

(d) On 15th Dec, METAVurse received $6,800 in cash as prepayment for services that will be performed in March 2022. When METVurse received the cash, it had recorded receipt of cash and recognized the whole amount as sales revenue.

(e) Earnest &Coopers determined that one of METAVurse's equipment asset, which has a carrying amount of $15,000, is impaired. The recoverable amount of the equipment is only $8,500.

(f) The payment of an accounts payable for $12,000 was incorrectly recorded twice.

REQUIRED (40 marks):

1. Prepare **<u>ALL</u> necessary journal entries** to correct each error for the fiscal year ending 31st December 2021. Date and explanations for journal entries are <u>not required</u>. Please label your journal entries according to the event sequence above. **(18 marks)**

2. Prepare the **Statement of Financial Position** for METAVurse Inc. for the fiscal year ending 31st December 2021 after the errors have been corrected. **(20 marks)**

3. Compute the correct **net profit margin** after the errors have been corrected (show your workings for the ratio and round to 4 decimal places). **(2 marks)**

Answer Solution to Essay Q1 – PART 1

<u>Journal Entries and workings</u>				
			Debit	**Credit**
(a)	**Prepaid Rent**		**12,000.00**	
		Rent Expense		**12,000.00**
	<u>Incorrect Entry</u>			
	Rent Expense		*18,000.00*	
		Cash		*18,000.00*
	<u>Correct Entry</u>			
	Prepaid Rent		*18,000.00*	
		Cash		*18,000.00*
	Rent Expense (18 k /6 x 2)		*6,000.00*	
		Prepaid Rent		*6,000.00*
(b)	**Salaries Expense**		**13,500.00**	
		Salaries Payable		**13,500.00**
	<u>Incorrect Entry</u>			
	None			
	<u>Correct Entry</u>			
	Salaries Expense		*13,500.00*	
		Salaries Payable		*13,500.00*
(c)	**Bad Debt Expense**		**3,500.00**	
	Allowance for Bad Debts		**1,500.00**	
		Accounts Receivable		**5,000.00**
	<u>Alternative entries:</u>			
	Allowance for Bad Debts		***5,000.00***	
		Accounts Receivable		***5,000.00***
	Bad Debt Expense		***3,500.00***	
		Allowance for Bad Debts		***3,500.00***
	<u>Incorrect Entry</u>			
	Bad Debt Expense		*2,200.00*	
		Allowance for Bad Debts		*2,200.00*
	<u>Correct Entry</u>			
	Allowance for Bad Debts		*5,000.00*	
		Accounts Receivable		*5,000.00*
	Bad Debt Expense		*5,700.00*	
		Allowance for Bad Debts		*5,700.00*

(d)	**Sales Revenue**		**6,800.00**	
		Unearned Revenue		**6,800.00**
	<u>Incorrect Entry</u>			
	Cash		*6,800.00*	
		Sales Revenue		*6,800.00*
	<u>Correct Entry</u>			
	Cash		*6,800.00*	
		Unearned Revenue		*6,800.00*
(e)	**Impairment Loss on Asset**		**6,500.00**	
		Accumulated Impairment Loss		**6,500.00**
	<u>Incorrect Entry</u>			
	None			
	<u>Correct Entry</u>			
	Impairment Loss on Asset		*6,500.00*	
		Accumulated Impairment Loss		*6,500.00*
(f)	**Cash**		**12,000.00**	
		Accounts Payable		**12,000.00**
	<u>Incorrect Entry</u>			
	Accounts Payable		*24,000.00*	
		Cash		*24,000.00*
	<u>Correct Entry</u>			
	Accounts Payable		*12,000.00*	
		Cash		*12,000.00*

Answer Solution to Essay Q1 – PART 2

METAVurse Inc.
Statement of Financial Position
As at 31 December 2021

Assets	
Current Assets:	
Cash	$ 177,000
Accounts Receivable	70,000
Less: Allowance for Bad Debts	(2,500)
Merchandise Inventory	50,000
Prepaid Rent	12,000
Non-current Assets:	
PPE	750,000
Less: Accumulated Depreciation	(250,000)
Less: Accumulated Impairment	(6,500)
Total Assets	**800,000**
Liabilities	
Accounts Payable	102,000
Income Tax Payable	900
Salaries Payable	13,500
Unearned Revenue	6,800
Short Terms Notes Payable	20,000
Total Liabilities	143,200
Equity	
Share Capital	535,000
Retained earnings	121,800
Total Stockholders' Equity	656,800
Total Liabilities & Stockholder's Equity	**800,000**

Answer Solution to Essay Q1 – PART 3

Net Profit Margin = $12,200 / $893,200
= 0.0137

Essay Question #2:

Dempsey Corporation first issued stock on 1st January 2019.
Dempsey has the following stock outstanding on 31st December 2019:

Preferred Stock (5% cumulative, $45 par, 10,000 shares authorized, 6,000 shares issued and outstanding)	$270,000
Common Stock ($5 par, 100,000 shares authorized, 75,000 shares issued and outstanding)	$375,000

For the fiscal years 2019 –2022, Dempsey Corporation had the following equity transactions during the year and also paid the following cash dividends at the end of the year:

	Equity Transactions during the period:	*Cash Dividends:*
2019		$10,000
2020	(a) Repurchased 1,000 shares of its own common stock at $7 per share, to be held in treasury.	$ 0
2021	(b) Reissued 200 shares of treasury stock at $10 per share.	$43,500
2022	(c) Reissued 500 shares of treasury stock at $4 per share	$30,000

REQUIRED (Total 20 marks):

1. Prepare the necessary **journal entries** to record each of the equity transactions (a) to (c) stated above. Date and explanations for journal entries are <u>not required</u>. **(9 marks)**

2. Calculate the **total cash dividends** received by Dempsey's preferred stockholders during each of the years from 2019 to 2022. Show your workings and round your answers to 2 decimal places. **(5.5 marks)**

3. Calculate the **cash dividend <u>per share</u>** received by Dempsey's common stockholders during each of the years from 2019 to 2022. Show your workings and round your answers to 2 decimal places. **(5.5 marks)**

Answer Solution to Essay Q2 – PART 1

(a)	Treasury Stock ($7 x 1,000)	7,000	
	Cash		7,000
(b)	Cash ($10 x 200)	2,000	
	Treasury Stock ($7 x 200)		1,400
	Share Premium, Treasury Stock*		600
	** Paid in capital in Excess, Treasury stock*		
(c)	Cash ($4 x 500)	2,000	
	Share Premium, Treasury Stock	600	
	Retained Earnings	900	
	Treasury Stock ($7 x 500)		3,500

Answer Solution to Essay Q2 – PART 2 & 3

2019:	Preferred:	(\$270,000 x 5% = \$13,500; only \$10,000 paid)
		\$10,000
	Common	\$0 per share
2020:	Preferred	\$0
	Common	\$0 per share
2021:	Preferred:	\$17,000 in arrears (\$3,500 from 2019 + \$13,500 from 2020) + \$13,500 for 2021 = \$30,500
	Common	Total dividends \$43,500 – preferred div \$30,500 = 13,000 common dividends
		Issued shares 75,000 – treasury shares 800 (1000–200) = 74,200 shares
		Div per share = \$13,000 / 74,200 = \$0.18 per share
2022:	Preferred	\$13,500
	Common	Total dividends \$30,000 – preferred div \$13,500 = \$16,500 common dividends
		Issued shares 75,000 – treasury shares 300 (800 - 500) = 74,700 shares
		Div per share = \$16,500 / 74,700 = \$0.22 per share