Seminar Question

1. Which of the following is NOT a potential cause of liquidity risk for a bank?
A. A decrease in the bank's stock price caused by market factors.
B. An increase in requests to fund large amounts of loan commitments.
C. A decrease in the availability of short-term borrowed funds.
D. An increase in requests by depositors to withdrawal large amounts of deposits.

2. Which type of financial intermediary is more highly exposed to liquidity risk?
A. Property-casualty insurance companies.
B. Life insurance companies.
C. Mutual funds.
D. Depository institutions.

3. As of August 2015, required reserve ratios in the U.S. for demand deposits were
A. 0 percent, 3 percent, and 10 percent.
B. 10 percent on all deposits.
C. 3 percent on all deposits.
D. 0 percent on all deposits.

4. An bank offers a $2,500 minimum balance NOW account paying 4 percent annual interest, and there are no service charges as long as the customer maintains the minimum balance. The customer maintains a balance of $5,000, and averages 750 checks per year. Each check has a processing cost to the FI of $0.15. What is the annual gross interest return on this account to the customer?
A. $112.50.
B. $100.00.
C. $312.50.
D. $137.50.

Calculation Questions

5. Walls Farther Bank has the following balance sheet (in millions of dollars).

Assets		Liquidity level	Liabilities and Equity		Run-off factor
Cash	$ 12	Level 1	Stable retail deposits	$ 55	3%
Deposits at the Fed	19	Level 1	Less stable retail deposits	20	10
Treasury securities	125	Level 1	Unsecured wholesale funding from:		
GNMA securities	94	Level 2A	Stable small business deposits	80	5
Loans to AA rated corporations	138	Level 2A	Less stable small business deposits	49	10
Loans to BB rated corporations	106	Level 2B	Nonfinancial corporates	250	75
Premises	20		Equity	60	
Total	$514		Total	$514	

Cash inflows over the next 30 days from the bank's performing assets are $5.5 million.
Calculate the LCR for Walls Farther Bank.

6. The following net transaction accounts and cash reserves at the Fed have been documented by a bank for computation of its reserve requirements (in millions) under lagged reserve accounting.

April	**Monday <u>10th</u>**	**Tuesday <u>11th</u>**	**Wednesday <u>12th</u>**	**Thursday <u>13th</u>**	**Friday <u>14th</u>**
Net transaction accounts	$200	$300	$250	$280	$260
Reserves at Fed	20	22	21	18	27

	Monday <u>17th</u>	**Tuesday <u>18th</u>**	**Wednesday <u>19th</u>**	**Thursday <u>20th</u>**	**Friday <u>21th</u>**
Net transaction accounts	$280	$300	$270	$260	$250
Reserves at Fed	20	35	21	18	28

	Monday <u>24th</u>	**Tuesday <u>25th</u>**	**Wednesday <u>26th</u>**	**Thursday <u>27th</u>**	**Friday <u>28th</u>**
Net transaction accounts	$240	$230	$250	$260	$270
Reserves at Fed	19	19	21	19	24

May	**Monday <u>1st</u>**	**Tuesday <u>2nd</u>**	**Wednesday <u>3rd</u>**	**Thursday <u>4th</u>**	**Friday <u>5th</u>**
Net transaction accounts	$200	$300	$250	$280	$260
Reserves at Fed	20	22	21	18	27

	Monday <u>8th</u>	**Tuesday <u>9th</u>**	**Wednesday <u>10th</u>**	**Thursday <u>11th</u>**	**Friday <u>12th</u>**
Net transaction accounts	$280	$300	$270	$260	$250
Reserves at Fed	20	35	21	18	27

	Monday <u>15th</u>	**Tuesday <u>16th</u>**	**Wednesday <u>17th</u>**	**Thursday <u>18th</u>**	**Friday <u>19th</u>**
Net transaction accounts	$240	$230	$250	$260	$270
Reserves at Fed	20	35	21	18	28

	Monday <u>22th</u>	**Tuesday <u>23th</u>**	**Wednesday <u>24th</u>**	**Thursday <u>25th</u>**	**Friday <u>26th</u>**
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The average vault cash for the computation period has been estimated to be $1 million per day.

a. What level of average daily reserves is required to be held by the bank during the maintenance period, May 11 - 24? If the required reserve rate is as below

Type of Deposit		Percentage
Net Transaction accounts		
Exempt amount	\$14.5m	0
Up to	\$103.6m	3%
Over	\$103.6m	10%

b. Is the bank in compliance with the requirements?

c. What amount of required reserves can be carried over to the following computation period?

d. If the average cost of funds to the bank is 8 percent per year and deposits at the Fed pay 0.5 percent, what is the effect on the income statement for this bank for this reserve period?

7. A bank has estimated the following annual costs for its demand deposits: management cost per account = \$140, average account size = \$1,500, average number of checks processed per account per month = 75, cost of clearing a check = \$0.10, fees charged to customer per check = \$0.05, and average fee charged per customer per month = \$8.

a) What is the implicit interest cost of demand deposits for the bank?

b) If the bank has to keep an average of 8 percent of demand deposits as required reserves with the Fed paying no interest, what is the implicit interest cost of demand deposits for the bank?

c) What should be the per-check fee charged to customers to reduce the implicit interest costs to 3 percent? Ignore the reserve requirements.