Learning Module 4: Working Capital & Liquidity

Q.1722 Which of the following conditions will *most likely* improve the liquidity position of a company;

A. Delaying accounts payable.

B. An increase in obsolete inventories.

C. An increase in uncollected receivables.

The correct answer is **A.**

Delaying accounts payable can improve a company's liquidity position by managing its cash outflows more effectively. Liquidity refers to a company's ability to meet its short-term obligations using its most liquid assets.

By delaying the payment of accounts payable, a company can retain cash for a longer period, thereby enhancing its ability to cover immediate financial needs without resorting to additional financing or liquidating assets. This strategy can be particularly useful in managing cash flow cycles and ensuring that the company has sufficient funds available to meet unexpected expenses or take advantage of investment opportunities.

B is incorrect. Obsolete inventories represent stock that is no longer sellable or has lost significant value, which can tie up capital that could otherwise be used more effectively. Holding onto obsolete inventories can lead to increased storage costs and reduce the company's ability to invest in more profitable inventory. Therefore, an increase in obsolete inventories is likely to harm, rather than improve, a company's liquidity position.

C is incorrect. The increase in uncollected receivables is also detrimental to a company's liquidity. Receivables represent money owed to the company by its customers. While they are considered assets, their value to the company's liquidity is contingent upon their collectability.

An increase in uncollected receivables indicates that the company is facing difficulties in converting sales into cash, which is a critical component of liquidity. This situation can lead to cash flow problems, as the company may not have enough liquid assets to cover its short-term obligations.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.1725 Ahmed Ali is an associate at a stock brokerage firm analyzing the liquidity position of one of its portfolio companies. He has gathered the following relevant information:

Total Sales	$600 million
Percentage of Cash Sales	40%
Average Receivables	180 million

Using the data given in the table, the accounts receivable turnover ratio of the portfolio company for liquidity purposes is *closest to:*

A. 1.33

B. 2.0

C. 3.33

The correct answer is ***B.***

$$\begin{aligned}\text{Receivable turnover} &= \frac{\text{Credit sales}}{\text{Average accounts receivable}}\\ &= \frac{\$600\text{ million} \times (1-40\%)}{\$180\text{ million}}\\ &= 2\end{aligned}$$

A is incorrect. *It assumes the following calculation in determining the receivable turnover ratio;*

$$\begin{aligned}\text{Receivable turnover} &= \frac{\$600\text{ million} \times 40\%}{\$180\text{ million}}\\ &= 1.33\end{aligned}$$

C is incorrect. *It assumes the following calculations;*

$$\text{Receivable turnover} = \frac{\$600\text{ million}}{\$180\text{ million}} = 3.33$$

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.1727 Assuming that the average industry norm for the number of days of receivables is 110 days, and a specific company operating in this industry has 182.5 days as its number of days of receivables, then which of the following choices is *most likely* correct?

A. The data given is insufficient to make an assumption.

B. The company is slower than the industry at collecting receivables.

C. The company is quicker than the industry at collecting receivables.

The correct answer is **B.**

The number of days of receivables is a critical financial metric that measures the average number of days a company takes to collect payment after a sale has been made. It is a direct indicator of the efficiency of a company's credit and collection policies.

In this scenario, the specific company has 182.5 days of receivables, which is significantly higher than the industry norm of 110 days. This discrepancy suggests that the company is slower than its industry peers in converting its receivables into cash.

A is incorrect. The data provided is sufficient to make a comparative analysis between the company's performance and the industry norm. The significant difference between the company's days of receivables and the industry norm provides a clear basis for the conclusion that the company is slower in collecting receivables compared to the industry average.

C is incorrect. The assertion that the company is quicker than the industry at collecting receivables is directly contradicted by the data provided. With the company having 182.5 days of receivables compared to the industry norm of 110 days, it is evident that the company takes a longer time to collect payments from its customers.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.1728 Which of the following would *most likely* make the number of days of inventory too high?

A. Obsolete inventory

B. Inadequate stock on hand.

C. Very little capital was invested in the inventory.

The correct answer is **A.**

Obsolete inventory is the primary reason that would most likely cause the number of days of inventory to be too high. The days of inventory metric measures the average time it takes for a company to turn its inventory into sales. A high number of days indicates that inventory is not being sold quickly, which can be a sign of several issues, including the presence of obsolete inventory. This situation is detrimental as it ties up capital in non-moving items, reduces cash flow, and may require additional costs for storage and maintenance.

B is incorrect. Inadequate stock indicates a lower level of inventory available for sale, which could lead to a higher inventory turnover rate if demand remains constant. Inadequate stock on hand would likely result in a lower number of days of inventory, not higher, as it suggests that the company is efficiently managing its inventory levels to meet customer demand without overstocking.

C is incorrect. When a company invests a small amount of capital in its inventory, it implies that the company is maintaining lower levels of stock. This strategy can be part of efficient inventory management practices, such as just-in-time (JIT) inventory systems, where materials and products are ordered and produced as needed to meet demand without holding excessive stock. In such cases, the number of days of inventory would likely be lower because the company is able to quickly sell through its available inventory, minimizing the time that products spend in storage.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.1729 Which of the following *most appropriately* measures the length of time it takes to convert a firm's cash into inventory and back into cash in the form of collections from the inventory sales?

A. Sales cycle.

B. Operating cycle.

C. Net operating cycle.

The correct answer is **C.**

The cash conversion cycle or net operating cycle measures the length of time it takes to convert a firm's cash into inventory and back into cash in the form of collections from inventory sales.

$$\text{Cash Conversion cycle} = \text{Number of receivables days} + \text{Number of inventory days} - \text{Number of pa}$$

A is incorrect. The sales cycle is the set of events from the moment a salesperson first engages with a prospective buyer to when the sale is made.

B is incorrect. The operating cycle does not include the number of days of payables. It measures the time between the purchase of raw materials and the sale of the finished product.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (a): Explain the cash conversion cycle and compare issuer's cash conversion cycles.

Q.1731 Which of the following is *least likely* a short-term type of security in which a company can invest to manage its cash?

A. U.S. Treasury bonds.

B. Bank certificate of deposits.

C. Money market mutual funds.

The correct answer is **A.**

U.S. Treasury bonds are generally not considered a short-term investment option for companies looking to manage their cash. This is because U.S. Treasury bonds are long-term investments with maturities typically exceeding ten years. When companies seek to manage their short-term cash needs, they usually look for investments that can be easily liquidated or that mature in a short period, typically within a year. Instead, U.S. Treasury bills, which are short-term government securities with maturities ranging from a few days to 52 weeks, are more suitable for such purposes.

B is incorrect. Bank certificates of deposit (CDs) are indeed a viable short-term investment option for companies. CDs are time deposits offered by banks with fixed terms and interest rates. They can range in maturity from a few months to several years, but shorter-term CDs (e.g., 3-month, 6-month, or 1-year CDs) can be particularly attractive for companies looking to manage their cash while earning a higher interest rate than a regular savings account.

C is incorrect. Money market mutual funds are another appropriate short-term investment vehicle for companies managing their cash reserves. These funds invest in short-term, high-quality debt securities, including Treasury bills, commercial paper, and certificates of deposit. Money market funds aim to maintain a stable net asset value (NAV) while offering returns slightly higher than those of a regular savings account.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.1735 Which of the following statements is *most accurate* for a firm with a very large inventory?

A. No effect on inventory turnover ratio.

B. A decreased number of days of inventory.

C. An increased number of days of inventory.

The correct answer is **C.**

A firm with a very large inventory is likely to experience an increased number of days of inventory. This is because the days of inventory metric, also known as inventory days or days inventory outstanding (DIO), measures the average time it takes for a company's inventory to turn into sales. A larger inventory implies that the company has more stock to sell through, which, without a proportional increase in sales volume, will take longer to deplete.

A is incorrect. Suggesting that a very large inventory has no effect on the inventory turnover ratio overlooks the fundamental relationship between inventory levels and turnover. The inventory turnover ratio, calculated as the cost of goods sold divided by the average inventory, is a key metric in assessing how efficiently a company manages its stock. A very large inventory, unless matched by a significant increase in sales, typically leads to a lower turnover ratio.

B is incorrect. The assertion that a very large inventory leads to a decreased number of days of inventory contradicts the basic principles of inventory management. A very large inventory, without a corresponding increase in the cost of goods sold, results in an increased, not decreased, number of days of inventory. A decrease in the number of days of inventory typically indicates more efficient inventory management and faster sales, which is not the case when inventory levels are significantly high without an increase in sales volume.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.2625 Atletico Inc. is a Spanish logistics company considering taking measures to manage its working capital more effectively. However, due to a recent increase in interest rates, the banks are reluctant to lend money to Atletico's institutional clients, which is why Atletico's inventory is taking longer to sell. To speed up the sale of inventory, Atletico has decided to offer longer collection terms to its debtors.
Considering Atletico's measures, is the firm's liquidity position *most likely* weakened by 'drags' or 'pulls' on liquidity?

A. These measures signal 'drags' on liquidity.

B. These measures signal 'pulls' on liquidity.

C. These measures signal both 'drags' and 'pulls' on liquidity.

The correct answer is **A.**

A company's liquidity position is significantly affected by the timing of cash flows and cash disbursements.
Atletico's liquidity position is weakened by liquidity drags. Decreased cash receipts, especially after payments are made, lead to decreased availability of funds which causes a "drag on liquidity."
"Drags on liquidity" include;

- Delayed collection of accounts receivable.
- Bad debts.
- Tight credit terms.
- Obsolete inventory.

B is incorrect. A "pull on liquidity" occurs when disbursements are paid early; companies are forced to spend money before receiving it from sales which could cover their obligations.
"Pulls on liquidity" include;

- Making early payments.
- Reduced credit limits.
- Limits on short-time lines of credit.
- Low liquidity positions.

C is incorrect. The measure only signals a drag on liquidity and not a pull on liquidity.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital &

Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.3582 If a company has an inventory turnover ratio of 10, then the number of days of inventory for the company is *closest to*:

A. 36.50

B. 38.50

C. 40

The correct answer is **A.**

The number of days of inventory is a crucial metric for businesses as it indicates the average time it takes for a company to turn its inventory into sales. The formula to calculate the number of days of inventory is given by:

$$\begin{aligned}\text{Number of days of inventory} &= \frac{365}{\text{Turnover ratio}}\\ &= \frac{365}{10}\\ &= 36.50\end{aligned}$$

This calculation shows that it takes approximately 36.5 days for the company to sell through its inventory. This metric is essential for understanding the efficiency of a company's inventory management and its ability to convert inventory into sales within a given period.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.3583 AWAII Corp. follows the principle of Just-in-Time (JIT) inventory management to manage its inventory. As compared to comparable firms in the same industry that don't use Just-in-Time (JIT) inventory management systems, AWAII is *more likely* to have a:

A. Higher current ratio.

B. Lower current ratio.

C. The same current ratio.

The correct answer is **B.**

AWAII Corp.'s adoption of the Just-in-Time (JIT) inventory management system is designed to minimize inventory levels and reduce holding costs. The JIT system's efficiency lies in its ability to synchronize inventory procurement with production schedules and sales forecasts, thereby reducing unnecessary inventory accumulation.

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Given this, AWAII Corp. is more likely to have a lower current ratio compared to comparable firms that do not use JIT inventory management systems. The current ratio, calculated as Current assets divided by Current liabilities, is a liquidity ratio that measures a company's ability to pay short-term obligations.

A is incorrect. A higher current ratio would imply greater liquidity, typically associated with higher levels of current assets relative to current liabilities. However, JIT inventory management aims to reduce inventory levels, which in turn decreases current assets. Therefore, firms employing JIT are less likely to have a higher current ratio compared to their counterparts that maintain larger inventories.

C is incorrect. While it might seem intuitive to some that maintaining the same inventory management strategy as industry counterparts would result in similar financial ratios, the adoption of JIT fundamentally changes how a company manages its resources. JIT's focus on minimizing inventory contradicts traditional inventory management practices, leading to significant differences in current assets and, consequently, the current ratio.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers’ liquidity levels.

Q.3586 PPL Bearing Limited is a company that manufactures ball bearings. A snapshot of the company's balance sheet accounts is given in exhibit 1.

Exhibit 1: Balance Sheet of PPL Bearing Limited
as of December 31, 2016

Account	Amount
Fixed Assets	$1.70 million
Inventories	$0.80 million
Long-term Investments	$1.2 million
Short-term Investments	$0.40 million
Accounts Receivable	$0.40 million
Short-term Borrowings	$1.00 million
Long-term Borrowings	$2.00 million
Accounts Payable	$0.50 million

Due to potential expansions, the company requires working capital funding. However, due to elevated debt levels, commercial banks are unwilling to provide additional funding to the firm. The most likely cheapest way to fund the company's liquidity requirement is:

A. By issuing fresh equity.

B. By issuing unsecured loans.

C. Through the assignment of accounts receivable.

The correct answer is C.

For PPL Bearing Limited, the most feasible and cost-effective method to fund its liquidity requirements, given its high debt levels and the reluctance of commercial banks to provide additional funding, is through the assignment of accounts receivable. This financial strategy involves the company using its accounts receivable as collateral to secure a loan.

The accounts receivable, which represent money owed by customers for goods or services delivered but not yet paid for, serve as a guarantee for the lender. This method is advantageous because it typically involves lower interest rates compared to unsecured loans, given the reduced risk for the lender due to the collateral.

A is incorrect. Issuing fresh equity as a means to fund working capital requirements is generally not the most cost-effective option, especially for a company already facing high debt levels. Issuing new equity involves diluting the ownership stakes of existing shareholders and can be a more expensive source of capital due to underwriting fees, legal costs, and other associated expenses of equity issuance.

B is incorrect. Opting for unsecured loans as a method to fund liquidity needs is typically more expensive than secured financing options like the assignment of accounts receivable. Unsecured loans do not require collateral, which presents a higher risk to lenders. To compensate for this increased risk, lenders charge higher interest rates on unsecured loans compared to secured loans. Given PPL Bearing Limited's

already elevated debt levels, it might find it challenging to obtain unsecured loans at favorable rates, making this option less attractive compared to using accounts receivable as collateral for funding.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c) describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.3956 If a company has an inventory turnover ratio of 8, and 90% of sales are on credit, then the number of days of inventory for the company is closest to:

A. 9 days.

B. 41 days.

C. 46 days.

The correct answer is **C.**

The formula to calculate the number of days of inventory is given by:

$$\text{Number of days of inventory} = \frac{365}{\text{Inventory Turnover Ratio}}$$

$$= \frac{365}{8} = 45.63 \ \approx 46\text{days}$$

The fact that 90% of sales are on credit does not affect the calculation. Sales on credit affect the number of days of receivables and not the number of days of inventory.

CFA Level I, Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS b: explain liquidity and compare issuers' liquidity levels.

Q.3957 Exhibit 1 shows some parameters of inventory management for three companies.

Exhibit 1: Inventory Management

	ASD Pvt. Limited	QWE Pvt. Limited	YYH Pvt. Limited
Number of Days in Inventory	60	50	40
Number of Days of Receivables	45	48	30

The firm *most likely* to have the highest current ratio is:

A. ASD Pvt. Limited.

B. QWE Pvt. Limited.

C. YYH Pvt. Limited.

The correct answer is **C.**

The table below furnishes the operating cycle of each company:

Company	Operating Cycle
ASD Pvt. Limited	$60 + 45 = 105$
QWE Pvt. Limited	$50 + 48 = 98$
YYH Pvt. Limited	$40 + 30 = 70$

A shorter operating cycle indicates that a company can convert its inventory into cash more quickly, implying a more efficient use of working capital and possibly a higher current ratio. On the other hand, a longer operating cycle suggests a greater need for liquidity to finance the cycle, potentially leading to a lower current ratio if the company needs to maintain higher levels of current liabilities to support its operations.

Given this understanding, YYH Pvt. Limited, with the shortest operating cycle (70 days), is more likely to have a higher current ratio. This implies efficient management of its inventory and receivables, which could result in a stronger liquidity position with lower relative levels of current liabilities.

Therefore, based on the provided data, YYH Pvt. Limited is *most likely* to have the highest current ratio among the three companies.

A is incorrect. ASD Pvt. Limited has the longest operating cycle of 105 days, indicating less efficient management of inventory and receivables compared to the other companies. This inefficiency suggests that ASD Pvt. Limited may need to maintain higher levels of current liabilities to finance its longer operating cycle, potentially leading to a lower current ratio.

B is incorrect. QWE Pvt. Limited has an operating cycle of 98 days, which is shorter than ASD Pvt. Limited but longer than YYH Pvt. Limited. While QWE Pvt. Limited may manage its inventory and receivables more efficiently than ASD Pvt. Limited, it still does not convert its assets into cash as quickly as YYH Pvt. Limited. This intermediate efficiency level suggests that QWE Pvt. Limited's liquidity position, while potentially stronger than ASD Pvt. Limited's, is not as strong as YYH Pvt. Limited's.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): explain liquidity and compare issuers' liquidity levels.

Q.3958 Thrift Store is a wholesaler that sells commodities like olive oil and wine to local shopping marts. Thrift Store maintains a receivable aging schedule to manage its accounts receivables. Using the information provided in the following aging schedule, determine what percentage of receivables were outstanding for 61 to 90 days in April.

Receivables Schedule

Days Outstanding	Apr-17	Average Collection Days
< 30 days	$180,000	18
31 - 60 days	$230,000	33
61 - 90 days	$155,000	76
> 91 days	$65,000	145

A. 89.68 %

B. 24.60%

C. 75.40%

The correct answer is **B.**

To determine the percentage of receivables that were outstanding for 61 to 90 days in April for Thrift Store, we need to analyze the given receivables aging schedule. The schedule provides the amounts of receivables that fall into various aging categories, including those that are less than 30 days old, those between 31 to 60 days, those between 61 to 90 days, and those that are more than 91 days old.

The amount of receivables outstanding for 61 to 90 days in April is $155,000. To find the percentage of the total receivables this amount represents, we sum all the categories of receivables and then calculate the proportion that $155,000 represents of this total.

The total receivables are calculated as follows:

$$\text{Total Receivables} = \$180,000 + \$230,000 + \$155,000 + \$65,000 = \$630,000$$

Therefore, the percentage of receivables outstanding for 61 to 90 days is calculated by dividing the amount for this category by the total receivables and then multiplying by 100 to get a percentage:

$$\frac{155,000}{630,000} \times 100 = 24.60\%$$

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.3959 A private company is facing issues to meet its short-term financing needs. As inflation has constantly been increasing and the central bank is expected to raise interest rates, the company's management is hesitant to take any decision. They have proposed three financing options to the board of the company to vote on. Which of the following will be the *least* costly financing option?

A. The company should issue an Initial Public Offering (IPO).

B. The company should borrow a short-term loan from a bank regardless of the expected rise in interest rates.

C. The company should sell some of its equipment to finance its short-term needs and buy back the equipment when required.

The correct answer is **B.**

Choosing to borrow a short-term loan from a bank, despite the expected rise in interest rates, is considered the least costly option for the company facing short-term financing needs. This decision is influenced by several factors, including the immediacy of obtaining funds, the flexibility of repayment, and the comparative costs associated with other financing options.

In a scenario where inflation is increasing, and there is an expectation of rising interest rates, securing a short-term loan locks in the current rates, which could be advantageous if rates continue to rise.

A is incorrect. Issuing an Initial Public Offering (IPO) is a significant and costly process that involves regulatory compliance, underwriting fees, and other associated costs. Furthermore, the process of going public is time-consuming, which may not align with the company's immediate financing needs. The decision to issue an IPO also exposes the company to market volatility and requires a commitment to transparency and ongoing disclosure that the company may not be prepared for.

C is incorrect. Selling some of the company's equipment to finance its short-term needs and planning to buy back the equipment later is fraught with risks and additional costs.

Firstly, selling assets can disrupt the company's operations and reduce its capacity to generate revenue.

Secondly, the assumption that the company can buy back the equipment when required may not hold true if the equipment becomes more expensive due to inflation or if it becomes unavailable in the market.

Therefore, selling assets as a means to finance short-term needs is more costly and less efficient compared to securing a short-term loan.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers’ objectives and compare methods for managing working capital and liquidity.

Q.3961 White Steel Co. is the market leader in the steel industry in Malaysia. White Steel has introduced many innovative products which have successfully penetrated the market time and time again. Compared to the industry, White Steel Co. has a shorter cash conversion cycle as shown in the following table:

	Steel Industry	White Steel Co.
Days of Inventory	55	39
Days of Receivables	93	111
Days of Payables	60	70
Operating Cycle	148	150
Cash Conversion Cycle	88	80

Which of the following is the most appropriate justification for White's shorter cash conversion cycle?

A. White Steel's inventory is obsolete.

B. White Steel has tighter terms with its debtors.

C. Whiter Steel's payment terms are unfavorable for its creditors.

The correct answer is **C.**

White Steel Co.'s shorter cash conversion cycle compared to the industry average can be attributed to its strategic management of payables. The formula for calculating the CCC is as follows:

$$\text{Cash Conversion Cycle} = \text{Days of Inventory} + \text{Days of Receivables} - \text{Days of Payables}$$

In the case of White Steel Co., the company has a higher number of days of payables (70 days) compared to the industry average (60 days). This indicates that White Steel takes longer to pay its suppliers than the industry average, effectively extending its cash outflow period. This strategic management of payables contributes to a shorter CCC by reducing the net time the company's cash is tied up in the production and sales process.

A is incorrect. White Steel has a shorter number of days of inventory (39 days) compared to the industry average (55 days), indicating that its inventory turns over more quickly. This is a sign of efficient inventory management and strong demand for its products, not obsolescence. Fast-moving inventory contributes positively to the cash conversion cycle by reducing the time cash is tied up in stock.

B is incorrect. White Steel has a higher number of days of receivables (111 days) compared to the industry average (93 days), indicating that it allows its customers more time to pay their invoices. This could be a strategic decision to accommodate key customers or to support sales, but it actually lengthens the cash conversion cycle by delaying cash inflows. Therefore, this option does not explain White Steel's shorter cash conversion cycle.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.3963 Olper's is a condensed milk distribution firm whose number of days of receivables, number of days of inventory, and number of days of payables are 110 days, 85 days, and 92 days respectively. Olper's operating cycle is *closest to*:

A. 195 days

B. 103 days.

C. 287 days.

The correct answer is **A.**

Recall that,

$$\text{Operating cycle} = \text{ Number of days of receivables} + \text{Number of days of inventory}$$

Therefore,

$$\text{Olper's operating cycle} = 110 + 85 = 195 \text{ days}$$

Note: We only include the number of days of payables when calculating the net operating cycle.

Net Operating Cycle=Number of days of inventory+Number of days of receivables - Number of da

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.3964 In financial analysis, what is the working capital?

A. Current assets.

B. Current liabilities.

C. Current assets minus current liabilities.

The correct answer is **C.**

Working capital is the capital of a business used in its daily trading operations.

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

A is incorrect. Current assets are a company's assets that are expected to be converted into cash within one year. They include cash, marketable securities, accounts receivables, inventories, and prepaid expenses.

B is incorrect. Current liabilities represent the amounts due to be paid to creditors within a year. They include accounts payable, short-term debt, accrued expenses, and dividends payable.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.3965 Pixels Corp. is a chip manufacturer whose current ratio is 1.3. If current liabilities are $270 million, Pixels' working capital is *closest to*:

A. $110 million.

B. $81 million.

C. $351 million.

The correct answer is **B.**

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It is calculated by dividing current assets by current liabilities. Given that Pixels Corp. has a current ratio of 1.3 and current liabilities of $270 million, we can calculate its current assets and subsequently its working capital.

$$\text{Working capital} = \text{Current assets - Current liabilities}$$

First, we need to calculate current assets. Also, recall that:

$$\begin{aligned}\text{Current ratio} &= 1.3 = \frac{\text{Current assets}}{\$270\text{ million}}\\ \text{Current assets} &= 1.3 \times \$270\text{ million}\\ &= \$351\text{ million}\end{aligned}$$

Working capital is defined as the difference between a company's current assets and current liabilities. Therefore, Pixels Corp.'s working capital can be calculated as follows:

$$\text{Working capital} = \$351\text{ million} - \$270\text{ million} = \$81\text{ million}$$

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers’ objectives and compare methods for managing working capital and liquidity.

Q.4040 Sydney Cavaliers’ 7% semi-annual coupon 5-year note, with a face value of $100, is trading at $96.7. If its marginal tax rate is 40%, then the company’s after-tax cost of debt capital is *closest to*:

A. 2.34%

B. 4.20%

C. 4.70%

The correct answer is **C.**

First, we must calculate the yield-to-maturity on outstanding notes using the financial calculator, as shown below.

$\text{FV} = 100,\ \text{PV} = -96.7\ \text{PMT} = \frac{7}{2} \times 100 = 3.5,\ \text{N} = 5 \times 2 = 10.$

Then press "CPT" "1/Y" to get 1/Y as 3.9%

Annualizing the 3.9%:

$$3.9\% \times 2 = 7.8\%$$

Therefore, the after-tax cost of debt is:

$$7.8 \times (1 - 0.4) = 4.7\%$$

7.8 × (1 − 0.4) = 4.7%

A is incorrect. 2.34% has been incorrectly obtained by failing to annualize the semi-annual yield. The 3.9% should be annualized before calculating the after-tax cost of debt.

B is incorrect. 4.20% has been incorrectly obtained by assuming that the semi-annual coupon is the before tax of debt. The coupon yield is used to calculate the coupon payments. We have to first calculate the bond's yield before calculating its after-tax cost of debt.

CFA Level I, Topic 7 - Fixed Income, Learning Module 1: Fixed-Income Instrument Features, LOS (a): Describe the features of a fixed-income security.

Q.4108 Which of the following ratios *most likely* measure how well key current assets and working capital are managed over time?

A. Cash ratios

B. Current ratios

C. Account receivable turnover

The correct answer is **C.**

The accounts receivables turnover is an activity ratio that measures how effective a company is in extending and collecting debts. A higher number indicates high efficiency. It is calculated as:

$$\text{Accounts Receivable Turnover} = \frac{\text{Credit Sales}}{\text{Average Receivables}}$$

A is incorrect. Cash ratio is a liquidity ratio. Liquidity ratio measures a company's ability to meet short-term obligations to creditors as they mature or come due. It is calculated as:

$$\text{Cash Ratio} = \frac{\text{Cash + Short-Term Marketable Instruments}}{\text{Current Liabilities}}$$

B is incorrect. The current ratio is also a liquidity ratio. Other liquidity ratios include quick ratios and cash ratios. The current ratio is calculated as:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.4109 Which of the following is *least likely* an internal financing method?

A. Factoring arrangements.

B. Converting liquid assets to cash.

C. Increasing work capital efficiency.

The correct answer is **A.**

Factoring arrangements are considered an external financing method because it involves a financial transaction with an entity outside the company. In factoring, a business sells its accounts receivable to a third party, known as a factor, at a discount. The factor then assumes the risk of collecting the receivables. This process provides the company with immediate cash, which can be crucial for managing cash flow or investing in new opportunities.

However, since this involves selling company assets (in this case, receivables) to an external party to generate funds, it is classified as external financing. Factoring is often used by companies that need immediate liquidity or those that do not qualify for traditional bank loans.

B is incorrect. Converting liquid assets to cash is indeed an internal financing method. This strategy involves utilizing the company's existing resources to generate funds. Liquid assets, such as marketable securities or inventory, can be quickly sold to meet financial needs without requiring external financing.

C is incorrect. Increasing working capital efficiency is another form of internal financing. This method focuses on optimizing the company's current assets and liabilities to free up cash. Strategies may include speeding up the collection of receivables, extending payment terms with suppliers, or managing inventory more effectively..

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.4110 Which of the following is *least likely* an example of external financing from capital markets?

A. Trade credit

B. Common equity

C. Commercial paper

The correct answer is **A.**

It is a type of credit extended by one business to another for the purchase of goods and services, allowing the buying business to pay the supplier at a later date. This arrangement is typically based on mutual trust and the longstanding relationships between the businesses involved. Trade credit is considered an internal financing mechanism because it is an extension of credit from one business to another within the supply chain, rather than involving the acquisition of funds from external investors or financial institutions.

B is incorrect. Common equity is an example of external financing from capital markets. When a company issues common stock, it is inviting external investors to provide capital in exchange for ownership stakes in the company. This process involves raising funds from the public or private equity markets, making it a clear case of external financing.

C is incorrect. Commercial paper is a form of external financing that involves capital markets. It is a short-term, unsecured debt instrument issued by corporations to finance their immediate operational needs, such as inventory purchases or payroll. Commercial paper is sold to investors, typically institutional investors, in the capital markets. The funds raised through the issuance of commercial paper provide the issuing company with external capital that can be used for short-term financial needs.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.4111 Which of the following working capital management approaches *most likely* involves holding large positions in cash, receivables, and inventories relative to sales?

A. Moderate approach

B. Aggressive approach

C. Conservative approach

The correct answer is **C.**

The conservative working capital management approach involves holding large positions in cash, receivables, and inventories relative to sales. This strategy is characterized by a preference for safety and liquidity over higher returns that could be achieved through more aggressive investment strategies. Companies adopting a conservative approach prioritize having sufficient resources on hand to meet any unforeseen demands or emergencies, thereby reducing the risk of financial distress.

This approach is particularly suitable for businesses operating in volatile markets or those that experience significant fluctuations in demand. By maintaining a larger buffer of current assets, these companies can ensure they continue operations smoothly without the need for urgent financing, which might come at a higher cost or with unfavorable terms.

A is incorrect. The moderate approach to working capital management strikes a balance between the conservative and aggressive approaches. Firms adopting this strategy aim to maintain a level of current assets that is sufficient to meet their operational needs without holding excessive amounts that could otherwise be invested for higher returns.

This approach seeks to optimize the trade-off between liquidity and profitability, ensuring that the company has enough resources to cover short-term obligations while not missing out on investment opportunities that could enhance shareholder value. The moderate approach does not involve holding large positions in cash, receivables, and inventories relative to sales, as suggested by the conservative approach.

B is incorrect. The aggressive approach to working capital management involves minimizing the investment in current assets relative to sales. Companies adopting this strategy aim to maximize their returns on investment by keeping their cash, receivables, and inventories as low as possible.

This approach carries a higher risk as it leaves the company with less financial flexibility to respond to unexpected challenges or opportunities. Firms using an aggressive strategy may experience higher returns in the short term but are also more vulnerable to liquidity crises. It contrasts sharply with the conservative strategy, which emphasizes safety and liquidity by holding larger positions in current assets.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity, LOS (c): Describe issuers' objectives and compare methods for managing working capital and liquidity.

Q.4112 Which of the following is *most likely* a secondary source of liquidity?

A. Short term funds.

B. Liquidating assets.

C. Cash management.

The correct answer is **B.**

Liquidating assets is considered a secondary source of liquidity because it involves converting non-cash assets into cash outside of the normal operations of the business. This process can include selling off equipment, real estate, or inventory to meet liquidity needs. Secondary sources of liquidity are typically utilized when primary sources, such as operating cash flows or existing cash reserves, are insufficient to meet immediate financial obligations.

A is incorrect. Short-term funds, such as cash, marketable securities, and revolving credit facilities, are considered primary sources of liquidity. These are the first resources a company turns to in order to meet its immediate financial obligations. Primary sources of liquidity are part of the normal, day-to-day financial management of a company and are designed to be readily available to cover short-term needs without disrupting the ongoing operations of the business.

C is incorrect. Cash management refers to the strategies and practices a company employs to optimize its handling of cash inflows and outflows. Effective cash management ensures that a company maintains adequate liquidity to meet its short-term obligations, while also maximizing the return on any excess cash through investments in short-term securities. Cash management includes activities such as managing receivables and payables, optimizing cash conversion cycles, and maintaining appropriate levels of cash reserves.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.

Q.4113 Which of the following is *most likely* a pull-on liquidity?

A. Tight credit.

B. Low liquidity positions.

C. Uncollected receivables.

The correct answer is **B.**

Low liquidity positions are a significant factor that can lead to a pull-on liquidity situation. A pull-on liquidity occurs when a company experiences cash outflows that exceed the inflow of cash, often due to aggressive working capital management strategies.

This situation can arise when a company spends cash more quickly than it receives funds from sales, leading to a depletion of available cash reserves. Low liquidity positions indicate that a company has a limited amount of cash on hand, making it more susceptible to cash flow pressures and potentially compromising its ability to meet short-term obligations.

A is incorrect. Tight credit refers to a situation where borrowing becomes more difficult or expensive, often due to stricter lending criteria or higher interest rates imposed by lenders. While tight credit can indeed impact a company's liquidity by making it harder to obtain financing, it is more accurately described as a drag on liquidity rather than a pull-on liquidity.

A drag on liquidity occurs when there is a delay or reduction in cash inflows, which can strain a company's financial resources. Tight credit conditions can lead to such a drag by limiting a company's access to external funds, but it does not directly cause cash to be paid out more quickly than it is received.

C is incorrect. Uncollected receivables represent money owed to a company by its customers for goods or services that have been delivered but not yet paid for. While uncollected receivables can indeed affect a company's liquidity by delaying cash inflows, they are more accurately classified as a drag on liquidity. The delay in converting sales into cash can strain a company's financial resources, especially if the receivables are not collected within the expected timeframe.

CFA Level I, Topic 4 - Corporate Issuers, Learning Module 4: Working Capital & Liquidity. LOS (b): Explain liquidity and compare issuers' liquidity levels.
