



Question for CMA Part 2 Section D: Risk Management

(Câu hỏi cho CMA Phần 2 Phần D: Quản lý rủi ro)

I. Trắc nghiệm

1. A firm is constructing a risk analysis to quantify the exposure of its data center to various types of threats. Which one of the following situations would represent the highest annual loss exposure after adjustment for insurance proceeds?

Frequency of Occurrence _____(years)_____	Loss <u>Amount</u>	Insurance <u>(% coverage)</u>
a. 1	\$ 15,000	85.
b. 8	75,000	80.
c. 20	200,000	80.
d. 100	400,000	50.

2. A company that prides itself on its innovation revised an existing popular brand without conducting sufficient market research. By taking this action, the company exposed itself to what types of risk?
- a. Credit risk and strategic risk.
 - b. Hazard risk and credit risk.
 - c. Operational risk and hazard risk.
 - d. Strategic risk and operational risk.



3. A German clothing retailer sells its products mainly online to customers worldwide. Company management believes that its primary risk relates to problems with its online website. A secondary risk is exchange rate volatility. Which one of the following **best** categorizes the company's primary risk and secondary risk?
 - a. Strategic risk, financial risk.
 - b. Hazard risk, operational risk.
 - c. Operational risk, hazard risk.
 - d. Operational risk, financial risk.

4. When implementing a continuous enterprise risk management process, what step should an organization take first?
 - a. Control previously identified risks.
 - b. Establish a risk management budget.
 - c. Establish its strategy and objectives.
 - d. Monitor and communicate results.

5. A rice farmer has decided to protect against possible price fluctuations at the time of harvest by purchasing some rice options. What type of risk response strategy has the rice farmer engaged in?
 - a. Avoidance.
 - b. Reduction.
 - c. Sharing.
 - d. Acceptance.



6. Even though a company implements an enterprise risk management program, it still is likely to have risk. This risk is considered
 - a. tolerable risks.
 - b. inherent risks.
 - c. residual risks.
 - d. uninsurable risks.

7. A company that adopts a value-at-risk approach
 - a. Calculates how much money the company loses or gains from the cash investments.
 - b. Ensures the probability of a loss on the investments does not exceed a specified limit.
 - c. Seeks to generate interest income that exceeds the losses incurred on the investments.
 - d. Estimates how much income varies vs. budget based on sensitivity to interest rates.

8. When implementing its enterprise risk management program, a company acquired a corporate-wide insurance policy covering all hazard risks. Under the policy, the insurance company will cover losses above a minimum amount. By taking this approach, the company has determined that the policy coverage
 - a. Transfers the residual hazard risk to the insurance company underwriting the policy.
 - b. Retains enough of the inherent hazard risk to make the residual risk cost effective.
 - c. Reduces the inherent hazard risk to an acceptable level of residual risk.
 - d. Avoids enough residual hazard risk that the only exposure left is the inherent risk.



9. The treasurer of a company has an objective to minimize financial risk in the intermediate to long term. Which one of the following options would be optimal if additional cash were needed?
 - a. Issue commercial paper.
 - b. Sell and lease back the corporate office building.
 - c. Issue additional common stock.
 - d. Issue additional long-term mortgage bonds.

10. If a company wants to reduce its operational risk, which one of the following initiatives would be most effective for the company to take?
 - a. Factor its accounts receivable, without recourse.
 - b. Expand its product offerings.
 - c. Focus its sales efforts on its largest customers.
 - d. Increase its breakeven point.

11. Which one of the following statements concerning the COSO Enterprise Risk Management (ERM) framework is most accurate?
 - a. Enterprise risk management primarily addresses internal control issues of an entity.
 - b. Enterprise risk management is carried out by a dedicated department within an entity.
 - c. Enterprise risk management focuses on strategy and objectives within an entity.
 - d. Enterprise risk management focuses principally on identifying potential negative impacts on an entity.

12. A package delivery company runs the risk of losing money due to automobile accidents. To manage this risk the company is considering a zero-deductible auto accident insurance policy. What type of risk response would this be?
 - a. Transfer.
 - b. Mitigation.
 - c. Sharing.
 - d. Acceptance.



13. Which of the following is not a part of the process of risk assessment?
 - a. Considering the likelihood of each risk's occurring.
 - b. Analyzing the potential impact of each risk event if it does occur.
 - c. Calculating the expected loss from each event.
 - d. Considering the interrelationship of the risks.

14. Which one of the following statements is true about inherent risk?
 - a. Inherent risk is the level of risk that remains after management has taken actions to mitigate the risk.
 - b. Inherent risks result in greater losses than operational risks.
 - c. Management can eliminate inherent risk by taking mitigating actions.
 - d. Inherent risk is risk that exists because of the nature of a company's business.

15. Which of the following risk management techniques involves setting aside funds to cover possible losses?
 - a. Risk retention
 - b. Risk transfer
 - c. Risk avoidance
 - d. Risk reduction

16. Which type of risk would be most directly affected by changes in government regulations?
 - a. Market risk
 - b. Credit risk
 - c. Operational risk
 - d. Regulatory risk



17. Which of the following does not increase credit risk?
 - a. Borrower's financial condition deteriorates
 - b. Increase in interest rates
 - c. A natural disaster that affects the borrower's ability to pay
 - d. Borrower's financial condition improves

18. Which of the following statements best describes 'Liquidity Risk'?
 - a. It is the risk that a company may become insolvent
 - b. It is the risk that a company may not be able to meet short-term financial demands
 - c. It is the risk that an asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit)
 - d. It is the risk that an investment's value will decrease

19. Which of the following is not considered a market risk?
 - a. Interest rate risk
 - b. Equity risk
 - c. Commodity risk
 - d. Credit risk

20. Which of the following is a non-financial risk?
 - a. Credit risk
 - b. Liquidity risk
 - c. Operational risk
 - d. Market risk

II. Tự luận

1. Miranda Wells joined Sycamore Corporation four months ago as a financial analyst and has been assisting Jake Richter, the controller, in evaluating capital projects. Shortly, Wells will be making her first presentation to the management committee responsible for selecting capital projects, and she has been working diligently to ensure that her analysis is correct. The management committee will be considering the following two mutually exclusive projects at this meeting. Both projects require the same initial investment and have the same project lives. Wells has used several capital budgeting methods to evaluate each project and presents the data as a table.



	<u>Project A</u>	<u>Project B</u>
Accounting rate of return	34%	26%
Internal rate of return	16%	19%
Net present value	\$2.6 million	\$3.5 million
Payback period	4 years	5 years

After completing her analysis, Wells believes Project B is superior to Project A. She intends to recommend Project B to the management committee and Richter agrees.

Questions

- A. For each of the four capital budgeting methods used by Miranda Wells to evaluate the two projects at Sycamore Corporation, explain the merits and limitations of each method.
 - B. Explain why Miranda Wells and Jake Richter believe that Project B is superior to Project A.
 - C. Identify three qualitative considerations that generally should be considered in capital budget evaluations.
2. Ultra Comp is a large information technology firm with several facilities. The firm's Audit Committee has determined that management must implement more effective security measures at its facilities. A Security Improvement Team has been formed to formulate a solution. Janet Lynch is the financial analyst assigned to the team. She has determined that a six-year time horizon is appropriate for the analysis and that a 14% cost of capital is applicable. The team is investigating the following three vendors.
- Vendor A is a new entrant to the security industry and is in the process of introducing its security system which utilizes new technology. The system would require an initial investment of \$4 million and have a life of six years. A net cash outflow of \$500,000 per year for salaries, operation, maintenance, and all costs related to the system would also be required.
 - Vendor B is an established firm in the security industry and has a security system that has been on the market for several years. The system requires an initial investment of \$1 million and will have a useful life of three years. At the end of the three-year period, Ultra Comp would have to replace the hardware at an estimated cost of \$1,250,000, based on current technology. A net cash outflow of \$750,000 per year for salaries, operation, maintenance, and all other related costs would also be required.



TACA Training & Coaching Accounting

Hotline: 0947.511.911 **Email:** Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyến, Cầu giấy, Hà Nội

- Vendor C is a nationally recognized firm in the security industry and has proposed to Ultra Comp that it provide a total security solution. Vendor C would provide all hardware and personnel to operate and maintain a security system as called for by the specifications of Ultra Comp for all its locations. Ultra Comp would be required to sign a six-year contract at a cost of \$1,400,000 per year.

Questions

- A. Ultra Comp utilizes the Net Present Value (NPV) method to quantify the financial aspects of corporate decisions. Calculate the NPV of each of the three alternatives.
- B. Based on financial considerations, which of the three alternatives should the team recommend? Explain why.
- C. Define sensitivity analysis and discuss how Ultra Comp could use this technique in analyzing the three vendor alternatives.
- D. Identify and briefly discuss three non-financial considerations that the Ultra Comp team should consider prior to making a recommendation to senior management.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

Answer for Section D: Risk Management

(Trả lời phần D: Quản lý rủi ro)

I. Trắc nghiệm

1. Correct answer a. The situation that occurs annually with an exposure of \$2,250 ($\$15,000 \times .15$) represents the highest loss exposure. The exposure of the other situations is \$1,875 ($\$75,000 \times .2 \div 8$), \$2,000 ($\$200,000 \times .2 \div 20$) and \$2,000 ($\$400,000 \times .5 \div 100$).
2. Correct answer d. Strategic risk includes brand risk and changing customer needs; operational risk includes customer satisfaction and change integration. Hazard risk deals with insurable events, and financial risk includes items such as credit risk. These last two are not applicable in the situation given.
3. Correct answer d. Classifications based on ERM document—website is operational, exchange rates, financial.
4. Correct answer c. For “c”, ERM is closely intertwined with a company’s strategy and objectives.
5. Correct answer c.

In a financial transaction the purchasing of options to cover price movement fluctuations is considered a risk transfer or risk sharing strategy.

Option: a contract which gives the buyer (the owner or holder) the right, but not the obligation, to buy or sell an [underlying asset](#) or [instrument](#) at a specified [strike price](#) on or before a specific date. Risk avoidance: elimination of hazards and exposures that can negatively affect an organization’s assets. Withdraw or not involved.

Risk reduction: optimize or mitigate losses, such as outsourcing

Risk sharing/transfer: transfer risks to others contractually or through insurance. Or share the burden of loss with other parties



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

Risk acceptance: retain the risk as the cost of insuring against the risk is greater than the losses sustained. Any amount of potential loss over the amount insured is retained risk.

6. Correct answer c.

Residual risk is the risk remaining after controls have been put in place to mitigate the inherent risk.

7. Correct answer b.

Value at Risk (VaR) is a measurement of the potential loss in value of a risky asset as the result of a specific risk event over a defined period for a given confidence interval. A company that adopts it uses it as a tool in assessing investment risk from a quantitative perspective.

8. Correct answer c.

Inherent risk is the level of risk that resides with an event or process prior to management taking a mitigation action. It is risk related to the very nature of the activities the company undertakes in the normal course of business. Management cannot do anything about the existence of inherent risk; however, it can take steps to address and, where appropriate, mitigate the effects of inherent risk. Residual risk is the level of risk that remains after management has taken action to mitigate the risk.

Purchasing insurance that will cover losses above a minimum amount means the company is retaining the residual risk of paying for the minimum amount not covered by the insurance. Therefore, the company is reducing the inherent hazard risk to an acceptable level of residual risk.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

9. Correct answer c.

If additional cash were needed, the best option from among those given would be to issue additional common stock. Common stock does not need to be repaid and does not incur interest. The only risks inherent in issuing common stock would be the risk that the offering price at which the issue could be sold might be too low to cover the underwriting fees and provide the needed cash; and, if it were a "best efforts" offering, that the full offering might not be able to be sold at all.

10. Correct answer b.

Operational risks result from inadequate or failed internal processes, people, or systems.

If something goes wrong with one product, such as a defective component that requires the company to recall the product, having other products can help to mitigate the damage to the company from the loss of sales and customer goodwill. If the company had only one product and that one product suddenly developed a problem caused by a failed process that made it unsellable, the company would have no cash flow.

Therefore, expanding the company's product offerings helps the company to diversify its business, thereby limiting the harm from something unforeseen happening to one of its products.

11. Correct answer c.

According to COSO's Enterprise Risk Management (ERM) framework, enterprise risk management is closely integrated with strategy setting and its purpose is the increase of the firm's value. The process of enterprise risk management is a part of the processes of strategy-setting and carrying out the strategies set. It is used in selecting and refining strategies to enhance growth and performance.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

12. Correct answer a.

The purchase of a zero-deductible insurance policy is an example of transferring the risk in full to another entity. Because there is no deductible to pay, the company would be transferring 100% of the risk to the insurance company.

13. Correct answer c.

Risk assessment involves analyzing identified risks from three perspectives: the likelihood of the risk's occurring, the potential impact or the relative significance of the event if it does occur, and the interrelationship of the risks on a unit-by-unit or total organization basis. Calculating the expected loss from an event is a part of the risk prioritization step in enterprise risk management, and risk prioritization follows risk assessment in the risk management process. Risk prioritization builds on the information developed in the risk assessment process.

14. Correct answer d.

Inherent risk is risk that exists simply due to the nature of a company's business. It cannot be eliminated, but it can be addressed through mitigating actions. (To "mitigate" means "to make less severe or intense; to moderate or alleviate.")

15. Correct answer a.

Risk retention is a risk management method where companies face the financial risks of loss by setting aside reserves (or self-insuring) rather than transferring the risks by purchasing insurance.

16. Correct answer d.

Regulatory risk refers to the potential that a change in laws and regulations will materially impact a security, business, sector, or market. Regulatory risks can arise from changes to law, regulation or policy and can have significant implications on the operations and profitability of businesses.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

17. Correct answer d.

Credit risk refers to the risk of loss arising from a borrower who does not make payments as promised. If a borrower's financial condition improves, it suggests they're more likely to fulfill their payment obligations, hence reducing credit risk.

18. Correct answer c.

Liquidity risk is the risk stemming from the lack of marketability of an investment that cannot be bought or sold quickly enough to prevent or minimize a loss. It includes asset liquidity risk and funding liquidity risk.

19. Correct answer d.

Market risk refers to the risk that the value of an investment will decrease due to moves in market factors. The four standard market risk factors are stock prices or equity risk, interest rates, foreign exchange rates, and commodity prices. Credit risk, on the other hand, is the risk of default on a debt that may arise from a borrower failing to make required payments.

20. Correct answer c.

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. This includes legal risk but excludes strategic and reputational risk. Credit, liquidity, and market risk are all considered financial risks.

II. Tự luận

1.

Answer A:

Accounting rate of return: The merits of the accounting rate of return (ARR) method are that the method is relatively simple to use and easy to understand. It considers the profitability of the projects under consideration. The limitations of the ARR method include ignoring cash flows and the time value of money.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

Internal rate of return: The merits of the internal rate of return (IRR) method are that it considers the time value of money and measures the true economic return of the project and productivity of the capital invested in the project. The limitations of the IRR method are that the answer is stated as a percentage rather than a dollar amount, making it more difficult to understand and explain to management. The IRR method also unrealistically assumes that cash flows are reinvested at the IRR of the project.

Net present value method: The merits of the net present value (NPV) method are that it considers the time value of money and size of the investment. The NPV method measures the true economic return of the project, the productivity of the capital investment, and the change in the organization's shareholders' wealth. The limitations of the NPV method include the assumption that all cash flows are reinvested at the discount (hurdle) rate, and it does not calculate a project's rate of return.

Payback method: The merits of the payback method are that it considers cash flows and provides a measure of the liquidity and risk of the investment. The limitations of the payback method are that it neglects the time value of money and the project's profitability.

Answer B:

Miranda Wells and Jake Richter are basing their judgment on the results of the net present value and internal rate of return calculations. These are both considered better measures because they include cash flows, the time value of money, and the project's profitability. Project B is better than Project A for both of these measures.

Answer C:

At least three qualitative considerations that should generally be considered in capital budget evaluations include the following.



- Quicker response to market changes and flexibility in production capacity.
- Strategic fit and long-term competitive improvements from the project, or the negative impact to the company's competitiveness or image if it does not make the investment.
- Risks inherent in the project, business, or country for the investment.

2. Answer A:

Net present value of each of the alternatives

	Time	Amount	14% PV Factor	Present Value
Vendor A				
Initial investment	0	\$4,000,000	1.000	\$4,000,000
Annual cash outflow	1-6	500,000	3.889	1,944,500
NPV				\$5,944,500
Vendor B				
Initial investment	0	\$1,000,000	1.000	\$1,000,000
Replacement	3	1,250,000	0.675	843,750
Annual cash outflow	1-6	750,000	3.889	2,916,750
NPV				\$4,760,500
Vendor C				
Annual cash outflow	1-6	\$1,400,000	3.889	5,444,600
NPV				\$5,444,600

Answer B:

Ultra Comp should select Vendor B. It is the optimal choice from a financial point of view as it meets the requirements at the lowest cost. Since the decision has already been made to implement a new security system, the issue is to decide on a system that meets the requirements at the lowest cost.

Answer C:

Sensitivity analysis is a tool to test the impact of changing investment assumptions on the resulting net present values. The method helps determine the “sensitivity” of outcomes to changes in the parameters. It shows how the output of the model depends on the input of the model.



TACA Training & Coaching Accounting

Hotline: 0947.511.911

Email: Support@hrg.vn

Địa chỉ: Tầng 2 tòa A Chelsea Residences 48 Trần Kim
Xuyên, Cầu giấy, Hà Nội

Answer D:

Non-financial factors that Ultra Comp should consider prior to making a recommendation include the following.

- Vendor A technology may be more effective in the long term even though it is the highest cost solution. However, there is a risk involved in the fact that this is new technology and may not prove effective.
- Vendor B technology is known to be effective and should be satisfactory for the near term. However, there is uncertainty in the long term.
- Since Vendor C is a nationally recognized leader, it may be in a better position to manage the security of Ultra Comp, especially as new developments arise.
- Ultra Comp should review the management capability and the financial stability of each of the vendors.
- Ultra Comp should contact previous clients of each of the vendors to determine their level of satisfaction with the quality and customer service of each vendor.