

## **Examples of CIPM Expert Exam Questions**

Based upon actual exam questions, these examples are intended to help you decide whether to become a candidate for the CIPM designation. They display the format of the item sets that appear on the Expert exam, and they illustrate some of the concepts on which Expert candidates have been tested in the past. The questions are grouped into three major topic areas: ethical and professional standards, performance evaluation, and the GIPS standards. An answer key is provided at the end of this document.

## **Topic Area: Ethical and Professional Standards**

Petra Martel, CIPM, is a performance analyst at Seton Valley Investment Management, a firm that manages micro cap growth portfolios for institutions and high net worth individuals.

Seton Valley's performance measurement policy states that any stock which has not traded in the last five business days of the month must be valued at the average midpoint of the bid-ask spreads from three different brokers. Martel's procedure in such cases is to request bid-ask quotes from five brokerage firms and to average the three highest midpoint prices.

Seton Valley's compliance officer is also a CIPM certificate holder. He informs Martel that the firm has made a strategic decision to focus on their larger clients. Seton Valley will raise their minimum investment level to US \$5 million and resign their relationships with clients whose portfolios do not meet the new minimum level.

After the equity markets close for the day Martel needs to speak with the firm's senior portfolio manager. As she is about to enter his office, the portfolio manager is informed that a highly-regarded analyst from a major brokerage firm is calling about a stock that Seton Valley holds in many portfolios. The portfolio manager asks Martel to wait outside his office and closes the door. After speaking with the security analyst, he places a second call during which Martel overhears him say, "Sell it." She is surprised the next morning to learn that no sell orders have been placed for client portfolios.

Martel plans to attend a conference on institutional investing to be held in New York City. She receives an e-mail from a Seton Valley client inviting representatives of all their investment managers to attend a successful Broadway play on the last evening of the conference. Knowing that tickets cost approximately US \$200 and that most performances are sold out, Martel accepts the invitation.

- 1. Is it *likely* that Martel's method of pricing thinly-traded securities violates the CIPM Association Code of Ethics or Standards of Professional Conduct?
  - A. No; she complies with the firm's valuation policy.
  - B. Yes; she consistently uses the three highest valuations.
  - C. No; she requests data from independent brokerage firms.
- 2. Is it *likely* that Seton Valley's compliance officer has violated the CIPM Association Code of Ethics or Standards of Professional Conduct by approving the firm's plans related to the minimum asset level?
  - A. Yes; the firm is not dealing fairly with all clients.
  - B. No; the firm has discretion to change minimum asset levels.
  - C. Yes; the firm must continue to serve existing clients regardless of policy changes.
- 3. Among the following choices, which is the *most* appropriate action for Martel to take after she overhears the senior portfolio manager's telephone conversations?
  - A. Do nothing.
  - B. Report to the compliance officer that the senior portfolio manager is trading on material nonpublic information.
  - C. Report to the compliance officer that the senior portfolio manager is trading for his own account prior to trading for clients' accounts.
- 4. Is Martel *likely* to violate the CIPM Association Code of Ethics or Standards of Professional Conduct by allowing the client to purchase her Broadway ticket?
  - A. Yes; the value of the ticket exceeds US \$100.
  - B. No, provided that she discloses the gift to her employer.
  - C. Yes; accepting the ticket threatens Martel's independence and objectivity.

Longitudinal Asset Management is a US-based portfolio manager investing in international equities. One of the firm's portfolios is invested entirely in Canadian and United Kingdom equities. At the beginning of an evaluation period, the market values of the portfolio's Canadian and UK segments are 5,000,000 Canadian dollars (CAD) and 3,000,000 pounds sterling (GBP), respectively. At the prevailing exchange rates, one CAD equals 0.80 US dollars (USD), and one GBP equals 2.00 USD.

Excluding dividend income, at the end of the period the Canadian equities are valued at CAD 5,300,000 and the UK equities are valued at GBP 2,880,000. The CAD now equals 0.90 USD while the GBP now equals 1.90 USD. Dividend payments of CAD 100,000 and GBP 180,000, respectively, are received at the prevailing exchange rates on the last day of the period.

- 5. The total return of the portfolio's UK equities segment expressed in base currency (USD) is *closest* to:
  - A. -8.8%.
  - B. -5.1%.
  - C. -3.1%.
- 6. The portfolio's total return, expressed in base currency, is the sum of the capital gain, yield, and currency components of return. In this framework, the capital gain component of the entire portfolio's total return is *closest* to:
  - A. 0.00%.
  - B. 1.00%.
  - C. 2.42%.
- 7. The currency component of the Canadian equities segment return in USD is *closest* to:
  - A. 9.0%.
  - B. 12.5%.
  - C. 13.5%.
- 8. In the UK equities segment, the currency component of the total return in base currency differs slightly from the percentage change in the exchange rate. This difference is due to the interaction of the:
  - A. GBP and CAD.
  - B. currency and market movements.
  - C. capital gain and yield components of return.

Alicia Moran, Treasurer of the Summer Children's Garden Endowment Fund, is analyzing the risk of the fund's equity portfolio relative to the portfolio's benchmark and the fund's minimum acceptable return (MAR). The benchmark is an appropriate capital market index, and the MAR is 0.3% per month or 3.6% per year. Moran compiles the information shown in Exhibit 1.

Summer Children Garden's Endowment Fund					
				Portfolio	Benchmark
				Returns Below	Returns Below
	Portfolio	Benchmark	Active	Target,	Target,
Month	Return	Return	Return	Squared	Squared
	(%)	(%)	(%)		
1	-3.12	-2.10	-1.02	11.70	5.76
2	-5.95	-4.87	-1.08	39.06	26.73
3	5.31	4.28	1.03	—	_
4	-5.16	-4.20	-0.96	29.81	20.25
5	4.50	4.93	-0.43	—	_
6	-0.27	-1.34	1.07	0.32	2.69
7	-1.52	-2.10	0.58	3.31	5.76
8	4.01	3.48	0.53	—	—
9	0.69	1.60	-1.00	—	—
10	-4.39	-3.26	-1.13	22.00	12.67
11	-3.07	-3.70	0.63	11.36	16.00
12	-1.88	-1.45	-0.43	4.75	3.06
13	-1.39	-2.25	0.86	2.86	6.50
14	4.58	3.51	1.07	_	_
15	-2.75	-2.75	0.00	9.30	9.30
16	0.91	1.70	-0.79	—	—
17	-1.38	-0.92	-0.46	2.82	1.49
18	2.56	2.89	-0.33	—	—
Arithmetic					
Average	-0.46	-0.36	-0.10		
Annualized					
Standard	11.76	10.67	2.78		
Deviation					
Sum			-1.86	137.29	110.22

Exhibit 1 Summer Children Garden's Endowment Fund

- 9. Moran determines that the portfolio's semideviation is less than its downside deviation. The semideviation would be the same as the downside deviation if the MAR were:
  - A. zero.
  - B. the risk-free rate.
  - C. the historical mean return.
- 10. The monthly tracking error of the portfolio is *closest* to:
  - A. -1.20%.
  - B. 0.80%.
  - C. 1.09%.
- 11. Over the 18-month evaluation period, the average monthly risk-free rate was 0.24%. Which statement *best* describes the relationship between the annualized Sharpe and Sortino ratios for the portfolio? The Sharpe ratio is:
  - A. lower than the Sortino ratio.
  - B. equal to the Sortino ratio.
  - C. higher than the Sortino ratio.
- 12. Which statement *best* characterizes the *ex post* shortfall risk of the portfolio in comparison with the *ex post* shortfall risk of the benchmark? The shortfall risk of the portfolio is:
  - A. less.
  - B. the same.
  - C. greater.

\_\_\_\_\_

The following formula pertains to the next item set.

## **Fixed Income Attribution (Campisi)**

Income Return = Coupon/Price

Treasury Effect = Negative Duration x Change in Treasury Rate Corresponding to Average Duration

Spread Effect for the Benchmark and Index = Total Return – Income Return – Treasury Effect

Spread Effect for the Portfolio = Change in Market Spread x Negative Duration

Change in Market Spread for the Benchmark and Index = Spread Effect/Negative Duration

Change in Market Spread for the Portfolio = Change in Market Spread for the Index

Selection Residual = Total Return – Income Effect – Treasury Effect – Spread Effect

Tom Styles, the head of performance measurement at Signal Investment Management, uses a sector allocation/security selection attribution model for both equity and fixed-income portfolios. The bond portfolio managers ask Styles to make his department's fixed-income attribution analysis more meaningful.

Styles uses the Campisi methodology to analyze the performance of a portfolio that contains US Treasury notes and bonds, corporate bonds, and high yield bonds. He prepares Exhibit 1 for the fixed-income portfolio managers' review.

	Year Ended 31 December			
	Portfolio	Benchmark	Value-Added	
	(%)	(%)	(%)	
Income Return	8.12	7.50	0.62	
Treasury Effect	6.03	7.67	-1.64	
Spread Effect	-4.02	-7.17	3.15	
Selection Residual	0.14	—	0.14	
Total Return	10.27	8.00	2.27	

Exhibit 1 Campisi Fixed-Income Attribution Model

- 13. Which statement best describes one of the reasons why bond portfolios need a different attribution model than common stock portfolios?
  - A. Bonds are relatively homogeneous in their pricing.
  - B. The systematic risk of bonds cannot be measured.
  - C. The excess returns of bond portfolios tend to be smaller.
- 14. The yield of a bond is *best* described by the sum of:
  - A. the Treasury effect, spread effect, and selection effect.
  - B. interest rate risk, credit risk, and prepayment risk premiums.
  - C. a short-term rate, a maturity premium, and a prepayment or default risk premium.
- 15. Which statement is *most* accurate? Over the evaluation period, the yield curve:
  - A. fell, and the portfolio's duration was longer than the benchmark's duration.
  - B. fell, and the portfolio's duration was shorter than the benchmark's duration.
  - C. rose, and the portfolio's duration was longer than the benchmark's duration.
- 16. Which statement is *most* accurate? Over the evaluation period, the portfolio's exposure to increases in risk premiums was *most likely*:
  - A. less than the benchmark.
  - B. approximately the same as the benchmark.
  - C. greater than the benchmark.

Tasman Asset Management, an Australian investment management firm that specializes in commodities and natural resources investments, claims to comply with the GIPS standards. Tasman uses the Modified Dietz method to calculate returns. The firm makes the following disclosures when presenting the performance of its Strategic Resources Composite:

- 1. Composite Description: The Strategic Resources Composite contains all portfolios invested in thinly-traded stocks issued by Australian exploration and extraction companies in the metals and energy sectors.
- 2. Fees: Performance is presented before management and custodial fees but after all trading expenses.
- Significant Cash Flows: Portfolios are temporarily removed from the Strategic Resources Composite when significant cash flows occur. Cash flows exceeding 7% of portfolio assets are considered significant. Additional information is available upon request.

The Strategic Resources Composite includes a portfolio that Margaret Callahan manages for one of Tasman's clients. At the end of the second calendar quarter, Callahan decides to reallocate portfolio assets in accordance with the firm's updated long-term energy supply and demand projections. Specifically, she decides to reduce the portfolio's exposure to the coal mining industry and to increase its weight in oil and gas exploration and drilling companies. The actual and target allocations are shown in Exhibit 1. Callahan estimates that it will take 45 days to accomplish the reallocation.

Portfolio Asset Reallocation			
Industry and Sector	Actual % <sup>1</sup>	Target %	
Gold	7	7	
Lead and Zinc	12	12	
Bauxite and Alumina	31	31	
Total Metals	50	50	
Coal	28	15	
Oil	10	20	
Gas	7	10	
Total Energy	45	45	
Cash	5	5	
Total Assets	100	100	

	Exhib	it 1	
Portfolio	Asset	Realloo	ation

<sup>1</sup>As of 30 June

- 17. Under the GIPS standards, Tasman is permitted to temporarily remove portfolios from composites because significant cash flows may:
  - A. distort performance if the market is volatile.
  - B. cause trading expenses to be abnormally high.
  - C. disrupt the implementation of the investment strategy.
- 18. Tasman's disclosure of its Significant Cash Flows policy is incomplete because it does not include the:
  - A. grace period for the composite.
  - B. number of times portfolios were removed during a given period.
  - C. amount of composite assets temporarily removed in a given period.
- 19. While in the process of reallocating her client's assets, Callahan must:
  - A. remove the portfolio from the composite.
  - B. keep the entire portfolio in the composite.
  - C. remove the portfolio's energy sector assets from the composite.
- 20. Upon acquiring a new portfolio accounting and performance measurement system, Tasman decides to establish temporary new accounts when significant cash flows occur. Under the GIPS standards, temporary new accounts:
  - A. are not required to be included in any composite.
  - B. must be included in the same composite as their associated portfolios.
  - C. must be included in a separate composite with the same investment strategy or objective.

\_\_\_\_\_

Gunnery Asset Management, an equity manager serving institutional clients, hires Certo Validation, Inc. to review its composite construction and performance calculation policies and procedures for the previous five calendar years.

Certo project manager Elisabeth Giardini meets with Joseph Farnsworth, Gunnery's head of performance, to plan the verification study. Farnsworth gives Giardini the firm's most recent performance presentations, representative marketing materials, the performance measurement policies and procedures manual, the composite definitions, and the complete list of open and closed accounts for the verification period.

During the meeting, Giardini learns the following facts:

- 1. Certain discretionary accounts that do not meet the criteria for inclusion in any of the other composites are assigned to a Diversified Composite that uses the Dow Jones Wilshire 5000 Composite Index, a broad US equity market index, as the benchmark.
- Gunnery considers portfolios to be discretionary unless the firm is required to obtain client approval prior to executing trades or the client selects portfolio securities and orders purchases and sales.
- 3. Gunnery uses the Modified Dietz method to calculate monthly returns. The firm's policy is to revalue accounts if a single cash flow exceeds seven percent of portfolio assets as of the beginning of the month.
- 4. Gunnery constructs and maintains composites on electronic spreadsheets but is in the process of selecting a new performance measurement system with compositing functionality.

- 21. Farnsworth states that the GIPS standards permit firms to define composites on the basis of benchmarks. In order to confirm that the Diversified Composite satisfies the Standards related to composite definition, it is *most* appropriate for Certo to determine whether the:
  - A. clients accept the benchmark.
  - B. composite definition specifically identifies the benchmark.
  - C. benchmark reflects the portfolio's investment objective or strategy.
- 22. In order to ascertain if Gunnery's classification of accounts as discretionary or nondiscretionary satisfies the requirements of the GIPS standards, it is *most* appropriate for Certo to determine whether clients' investment restrictions:
  - A. meet Gunnery's written guidelines for discretion.
  - B. are properly documented and consistently applied.
  - C. hinder Gunnery from implementing the intended strategy.
- 23. Certo finds several instances where Gunnery's treatment of external cash flows is inconsistent with the firm's written policy, resulting in portfolio returns that are materially higher or lower than they should have been. In all cases uncovered, the effect on composite returns for the annual periods presented is insignificant. It is *most* appropriate for Certo to:
  - A. select additional sample accounts for examination.
  - B. correct the performance presentations affected by the errors.
  - C. disregard random errors that do not materially affect composite returns.
- 24. In accordance with the required verification procedures set forth in the GIPS standards, it is *most* appropriate for Certo to consider Gunnery's use of spreadsheets when:
  - A. confirming that portfolios are discretionary.
  - B. selecting sample accounts for examination.
  - C. reviewing the disclosures in composite presentations.

1.	В
2.	В
3.	А
4.	В
5.	С
6.	А
7.	С
8.	С
9.	С
10.	В
11.	С
12.	В
13.	А
14.	С
15.	В
16.	А
17.	С
18.	А
19.	В
20.	А
21.	С
22.	С
23.	А
24.	В