2020 CFA® Exam Prep

IFT Mock Exams

Level III

Mock Exam 1

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Exam 1 Morning Session

Questions	Topic	Minutes
1	Portfolio Management – Behavioral Finance	10
2	Portfolio Management – Private Wealth Management (1)	25
3	Portfolio Management – Private Wealth Management (1)	15
4	Portfolio Management – Institutional Investors	17
5	Portfolio Management – Institutional Investors	18
6	Portfolio Management – Private Wealth Management (1)	18
7	Portfolio Management – Economics	15
8	Portfolio Management – Fixed Income	14
9	Portfolio Management – Equity	17
10	Portfolio Management – Alternative Investments	12
11	Portfolio Management – Trading, Performance Evaluation, and Manager Selection	19
		Total: 180

Start time: 9:00 AM

End time: 12:00 PM

QUESTION 2 HAS FOUR PARTS (A, B, C, D) FOR A TOTAL OF 25 MINUTES.

Robert and Mary Puentes, both age 62, live in U.S. Robert recently sold off his advertising company and retired. The Puentes live in a mortgage-free house with a market value of USD 2,250,000. Robert has a taxable investment portfolio with a current market value of USD 7,500,000 exclusive of the Puentes' home, and invested in traditional assets. The Puentes will rely on their investment portfolio to pay for expenses in excess of Robert's annual retirement income of USD 110,000 from the sale of his business. The retirement payments are not indexed to future inflation and are fully taxable as ordinary income.

Robert wants specialized advisers for tax planning, estate planning, and investment strategies. He is interested in sophisticated investments with a longer time horizon, greater risk, and less liquidity.

Robert meets with John Mesa, CFA, of Acuva Wealth Managers, to discuss his retirement goals and his and Mary's retirement funding needs. He plans to purchase a vacation home worth approximately USD 1,150,000 in five years. Robert's goals are to grow the asset base of his portfolio over time and to maintain its after-tax purchasing power. He intends to donate USD 600,000 to his favorite charity in 15 years. Upon his death, Robert wants his wife's lifestyle needs to be supported.

Mesa considers three approaches - mortality tables, annuity method, and Monte Carlo simulation to analyze Robert's retirement goals.

A. **Determine** the client segment or adviser type that is *most* appropriate for Robert's plan. **Justify** your response.
ANSWER QUESTION 2-A IN THE TEMPLATE PROVIDED.

(5 minutes)

B. i. Identify Robert's planned goals.
ii. Determine the most suitable approach that Mesa should use to analyze Robert's retirement goals. **Justify** your response by giving an advantage of the chosen approach and a disadvantage of each approach not selected.
ANSWER QUESTION 2-B IN THE TEMPLATE PROVIDED.

(11 minutes)

Mesa gathers the following behavioral considerations related to the Puentes' retirement planning.

- In his investment portfolio, Robert continues to hold stocks that decline in value because he feels he has to break-even on his losing investments. He often sells winners to realize their gains to avoid any further risk.
- Mary's investment decisions are based on their expected costs in retirement and thus favors large-cap dividend-paying stocks over riskier stocks. She, like Robert, is also hesitant about selling loss-making investments. She explains her preference by saying that in retirement, they should be spending less than their current expenditures to cover for unforeseen future needs.

The house owned by the Puentes is retained as separate property. The Puentes live in a community property regime. The community property regime entitles a surviving spouse to receive one-half of the community property after the first spouse's death. Only 15% of Robert's investable assets are community property. Exhibit 1 summarizes gift and inheritance tax rates applicable to the Puentes family.

Exhibit 1
Gift and Inheritance Tax Rates

Tax Type	Tax Rate
Spousal inheritance tax	25%
Spousal gift tax	30%
Non-spousal inheritance tax	50%
Non-spousal gift tax	30%

Note: All taxes are due immediately at the time of the transfer and are paid for by the recipient.

Robert feels that Mary's legal entitlement under the community property rules will not be sufficient to meet her financial needs. Mesa estimates that if Robert were to die today, Mary would need to inherit USD 950,000 (excluding their current house) net of any taxes to meet her needs.

C. Select the behavioral consideration for:
i. Robert
ii. Mary
Justify *each* selection with *one* fact from the information about the Puentes' provided in vignette.

ANSWER QUESTION 2-C IN THE TEMPLATE PROVIDED.

Answer Question 2 on This Page

2-A. Determine the client segment or adviser type (mass affluent segment, high-net-worth segment, ultra-high-net-worth segment) that is *most* appropriate for Robert's plan. Justify your response.

2-Bi. Identify Robert's planned goals.

2-Bii. Determine the most suitable approach that Mesa should use to analyze Robert's retirement goals. (Circle one)	**Justify** your response by giving an advantage of the chosen approach and a disadvantage of each approach not selected.
Mortality Tables	
Annuity Method	
Monte Carlo Simulation	

Exam 1 Afternoon Session

Questions	Topic	Minutes
1 – 6	Ethical and Professional Standards	18
7 – 12	Ethical and Professional Standards	18
13 – 18	Portfolio Management - Economics	18
19 – 24	Portfolio Management - Fixed Income	18
25 – 30	Portfolio Management – Equity	18
31 – 36	Alternative Investments	18
37 – 42	Derivatives	18
43 – 48	Derivatives	18
49 – 54	Portfolio Management - Performance Evaluation	18
55 – 60	GIPS	18
	Total:	**180**

Start time: 2:00 PM

End time: 5:00 PM

Allocate an average of 3 minutes per question for a total of 180 minutes (3 hours).

10. Does Miller violate any CFA Institute Standards in the preparation of and compensation received for equity reports?

A. Yes, by representing her recommendations as independent.
B. No.
C. Yes, by receiving compensation from companies on which she produces reports.

11. In the preparation of equity reports, does Makeen violate any CFA Institute Standards?

A. Yes, in the citation of the study found in Miller's internet postings.
B. Yes, in using Miller's summaries and forecasts.
C. Yes, in using Miller's summaries and improperly referencing the study found in Miller's postings.

12. Makeen's dealings with Davidson are *least likely* to violate the CFA Institute Standard related to:

A. Material Nonpublic Information.
B. Priority of Transaction.
C. Fair Dealing.

Alpine Investments Case Scenario (Questions 13 – 18)

Andrew Baker, a senior portfolio manager at Alpine Investments, is considering adding three new securities to his internationally focused fixed-income portfolio. The securities and their weights under consideration are as follows:

- 1-year US Treasury note; weight in the portfolio: 30%
- 10-year A+ rated corporate bond (callable); weight in the portfolio: 50%
- 10-year mortgage-backed security (MBS) (government-backed collateral); weight in portfolio: 20%

Baker will only make the added investment provided that the expected spread/premium of the investment is at least 0.25 percent (25 bps) over the 10-year Treasury bond. He collects the following information:

Exhibit 1

- Real risk-free interest rate: 1.5%
- Current inflation rate: 3.2%
- Spread of 10-year over 1-year Treasury note: 1.2%
- Long-term inflation expectation: 2.5%
- 10-year MBS prepayment risk spread (over 10-year Treasuries)*: 95 bps
- 10-year call risk spread: 55 bps
- 10-year A+ credit risk spread (over 10-year Treasuries): 60 bps

*Note This spread implicitly includes a maturity premium in relation to the 1-year T-note as well as compensation for prepayment risk.

Baker is evaluating the performance of U.S. equities relative to U.S. investment-grade corporate bonds for determining the appropriate future allocation for Alpine's Balanced Fund. For this, Baker forecasts the following variables.

Exhibit 2: Equity Market Data

Expansion rate for P/E per year	0.20%
Forecasted dividend yield	2.5%
Real GDP growth estimate	3.0%
Premium for corporate earnings growth over nominal GDP	1.0%
Expected inflation	2.5%
Repurchase yield	0.5%
YTM on a long-term government bond	6.0%
Equity risk premium forecast	3.2%

Baker is considering investing in international equities for his Global Multi-asset Portfolio. He asks Clarke, a research analyst, to give the capital market expectations for the coming future. Clarke collects the data displayed in Exhibit 3.

Exhibit 3: Asset Class (Emerging Market Equities)

Standard deviation	20.50%		
Correlation Matrix	U.S. Equities	Emerging Market Equities	GM
U.S. Equities	1.0	0.60	0.85
Emerging Market Equities	0.60	1.0	0.70
GM	0.85	0.70	1.0

Clarke also provides the following facts and estimates:

- The Sharpe ratio of GM Portfolio and the segmented market is estimated to be 0.33.
- The standard deviation of GM is estimated to be 9.5%.
- The risk-free rate of interest is 4.5%.
- The standard deviation of U.S. equities is 23.0%.
- U.S. equities are estimated to be 80% integrated, and Emerging Market Equities are estimated to be 60% integrated.

Baker asks Clarke about the future fiscal and monetary outlook. Clarke makes the following statements:

1. It is always recommended to know the historical performance of the CEO of the company before investing in it. Though Frio Industries has not shown any significant stock price appreciation over many years compared to its peers, there have been recent newspaper headlines about its new CEO. Frio's CEO has joined from APCO after successfully managing its operations for over a decade. Based on his previous track record, you should invest in shares of Frio Industries, which will make a good investment now.	• Availability • Confirmation • Framing • Gambler's fallacy • Representativeness • Overconfidence • Hot hand fallacy	Representativeness refers to judgments based on stereotypes. It classifies new information based on past experiences and classifications. Andy may be overly optimistic that Frio Industries shares will perform well because the CEO of Frio Industries did well at APCO.
2. Global Equity Funds have increased by 1.5 – 2.0 times the historical average over the past two years. Based on this information, I expect global equity funds to face a reversal in near future. As a result, it is preferred to reallocate	• Availability • Confirmation • Framing • Gambler's fallacy • Representativeness • Overconfidence	The gambler's fallacy is a cognitive behavioral bias in which an analyst wrongly projects a reversal to a long-term trend. This reflects a faulty understanding of the behavior of random events. The analyst expects

funds from equities to fixed-rate portfolio assets.	• Hot hand fallacy	a pattern that has diverged from the long term average to reverse within a specific period of time.

Question: 2. Topic: Private Wealth Management (1). **Minutes: 25**

2-A. Determine the client segment or adviser type (mass affluent segment, high-net-worth segment, ultra-high-net-worth segment) that is most appropriate for Robert's plan**. Justify** your response.
Reference: Overview of Private Wealth Management, Section 8, LOS p.
Grading scheme: 2 marks for correctly determining the client segment or adviser type. 3 marks for justification.

Response:
"Private Client" Range of High-Net-Worth Segment.
Justification: The private client range in the high-net-worth segment covers asset levels between $1 million and $10 million Robert's asset level of $8 million puts him in the range of the high-net-worth segment.

Robert's interest in more sophisticated investments with longer time horizons, greater risk and less liquidity requires a more customized strategy and a wealth manager with thorough product knowledge. Hence a private wealth manager that specializes in high-net-worth clients rather than a manager for the mass affluent segment can provide a team of specialized advisers that supports more customized strategies for more sophisticated investments that meet Robert's investment objectives. Also, such a team of people will likely have specialized and complementary skills, including tax advisers, legal advisers, investment specialists, and a relationship manager.

2-Bi. Identify Robert's planned goals.
Reference: Overview of Private Wealth Management, Section 3.2.1., LOS d.
Grading scheme: 3 marks for correctly identifying Robert's planned goals.

Exam 1 Afternoon Session Solutions

1	C	21	C	41	C
2	A	22	A	42	A
3	C	23	A	43	B
4	B	24	C	44	C
5	A	25	B	45	A
6	C	26	C	46	C
7	C	27	B	47	A
8	B	28	C	48	B
9	A	29	C	49	A
10	A	30	C	50	B
11	B	31	B	51	B
12	B	32	A	52	B
13	C	33	C	53	A
14	C	34	A	54	B
15	A	35	C	55	A
16	B	36	B	56	A
17	C	37	B	57	C
18	B	38	C	58	C
19	B	39	B	59	B
20	B	40	B	60	A

1. C is correct. According to the general principles of conduct of the Asset Manager Code, Managers must “uphold the applicable rules governing capital markets,” not just stay informed about them. *Asset Manager Code of Professional Conduct.*

2. A is correct. According to the recommendations of Section D(7) of the Asset Manager Code, The risk management process should identify, measure, and manage the risk position of the Manager and its investments, including the sources, nature, and degree of risk exposure. Titan’s risk management process seeks to match the risk profile desired by clients with the risk profile of their investments. It is consistent with the risk management process recommended by the Asset Manager Code of Professional Conduct. B is inconsistent because portfolio information according to D(3), needs a review by an independent third-party. C is inconsistent because the business-continuity plan D(6) lacks plans for monitoring, analyzing, and trading investments if primary systems are unavailable. *Asset Manager Code of Professional Conduct.*

3. C is correct. According to the recommendations of Section F(4), Disclosures, conflicts of interests generated from a brokerage or other entities' relationships, other client accounts and fee structures, etc. should be disclosed to all clients. According to Section F, disclosures should be truthful, accurate, complete, and understandable. It is unlikely that clients would easily understand complicated calculations. Further, communications with clients should be on an ongoing and timely basis. Performance reports should be communicated at least quarterly, not only when clients ask for them. *Asset Manager Code of Professional Conduct.*

4. B is correct. According to the recommendations and guidance of Section F(4d) of the Asset Manager Code, managers must disclose to prospective clients the average or expected expenses or fees clients are likely to incur, and to existing clients, the actual fees and other costs charged to them. *Asset Manager Code of Professional Conduct.*

5. A is correct. Section E, Performance and Valuation of the Asset Manager Code recommends the use of fair market values from independent third parties when available, and when such third-party prices are not available, the use of “good faith” methods such as internal methods to determine fair value. Titan’s policy appears consistent with this requirement. *Asset Manager Code of Professional Conduct.*

6. C is correct. Section C(5) Trading of the Asset Manager Code, recommends policies that ensure fair and equitable, not equal trade allocations. When allocating shares of an initial public offering, Managers should ensure that clients for whom the security is suitable (according to the client’s investment objectives) are given opportunities to invest. Further, Section B(6)(b), Investment Process and Actions, requires clients to be treated equitably,