

**MUNICIPAL ADVISOR REPRESENTATIVE QUALIFICATION  
EXAMINATION  
(SERIES 50)**

**Content Outline**

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## **INTRODUCTION**

This content outline is intended to help candidates prepare for the Municipal Advisor Representative Qualification Examination (Series 50) by providing relevant information about the examination itself and sharing pertinent information about the content areas that are covered. The sample questions that appear on pages 15-16 are similar to the types of multiple-choice questions that will appear in the examination. In addition, regulatory and industry websites and other references that may be useful in preparing for the examination are provided at the end of the outline.

The questions used in the examination are reviewed and updated on a regular basis and reflect current market practices. Questions that test new rules or amendments will be included in the examination after the effective date of the rule or rule change. Existing questions on portions of rules that have been deleted will be removed from the examination prior to the effective date of the amendment. The Series 50 exam is developed and maintained by the Municipal Securities Rulemaking Board, the self-regulatory organization that establishes rules for municipal securities dealers and municipal advisors.

## **PURPOSE FOR AND DEVELOPMENT OF THE EXAMINATION**

The Dodd-Frank Wall Street Reform and Consumer Protection Act required that the MSRB develop a regulatory framework for municipal advisors, including establishing professional standards. The Series 50 examination was developed as a part of the fulfillment of that mandate.

The content areas covered by the examination were determined by a panel of practicing municipal advisors from both non-dealer and dealer firms who represented various types of businesses and were nationally diverse. The examination is intended to measure the degree to which candidates have demonstrated knowledge and skills necessary to perform the responsibilities of a municipal advisor representative.

The development of the examination by the panel was ratified with significant input from municipal advisors nationwide who responded to the topics on the outline by completing a survey about the content. The respondents provided many additions and clarifications that were included in the final outline.

The municipal advisor representative is a natural person associated with a municipal advisor who engages in municipal advisory activities on the municipal advisor's behalf.

## **ELIGIBILITY REQUIREMENTS**

In order to register for the Series 50 examination, a candidate must be associated with a municipal advisor firm that is registered with both the Securities and Exchange Commission and the MSRB.

### STRUCTURE OF THE EXAMINATION

The Series 50 examination consists of 100 multiple choice questions that are organized under the following major functions:

FUNCTION	DESCRIPTION	NUMBER OF QUESTIONS
1	Understanding SEC and MSRB Rules Regarding Municipal Advisors	12
2	Understanding Municipal Finance	35
3	Performing Issuer's Credit Analysis and Due Diligence	12
4	Structuring, Pricing and Executing Municipal Debt Products	31
5	Understanding Requirements Related to the Issuance of Municipal Debt	10
		100

Each candidate receives a unique sample of 100 questions that are drawn from the collection of test questions available for the examination, subject to two constraints—the content covered by the examination and the overall difficulty of the examination is the same for all candidates.

### ADMINISTRATION OF THE EXAMINATION

Consistent with the administration of other securities industry examinations, this 100-question examination is administered at a computer. Candidates receive a short tutorial providing details of the examination administration prior to initiating the test. Including the 30 minutes permitted for the tutorial, candidates are allowed three and one-half hours to finish the Series 50 examination.

A candidate must select one of the four answer choices that are presented for each question in order to complete the examination. Candidates should remember these relevant points about the examination:

- Each correct answer is worth one point.
- It is to the candidate's advantage to answer each question, even if the candidate is uncertain of the correct response.
- Candidates are given three hours to complete the examination.
- Any materials needed to complete the examination will be provided by the test center or within the test itself.

A candidate's total score will be equal to the number of questions answered correctly. The MSRB will publicly announce the passing score for the examination after a committee of

municipal advisors determines the passing score, which reflects the level of performance the committee judges necessary for registration as a municipal advisor representative.

### **CONFIDENTIALITY**

In order to ensure that its examinations constitute valid tests of the qualifications of persons who take them, the MSRB has instituted various procedures, in the question-writing and administrative phases, which are designed to preserve the confidentiality of the examinations. On several occasions, the MSRB has found it necessary to take legal action, alleging copyright violations, against securities training schools that had used in their training material questions and answers that were determined to have been taken from questions contained in MSRB qualification examinations. In addition, candidates are advised that the practice of “debriefing” persons who have taken a qualification examination may not only give rise to an infringement of the MSRB’s copyright but would be a violation of MSRB rules for the candidate. MSRB Rule G-3(f) on “Confidentiality of Qualification Examinations” states that:

*No associated person of a broker, dealer, municipal securities dealer, or municipal advisor shall:*

*(i) in the course of taking a qualification examination required by this rule receive or give assistance of any nature;*

*(ii) disclose to any person questions, or answers to any questions, on any qualification examination required by this rule;*

*(iii) engage in any activity inconsistent with the confidential nature of any qualification examination required by this rule, or with its purpose as a test of the qualification of persons taking such examinations; or*

*(iv) knowingly sign a false certification concerning any such qualification examination.*

**Municipal Advisor Representative Examination**  
(Series 50)

FUNCTION 1: Understanding SEC and MSRB Rules Regarding Municipal Advisors (12% of exam questions)

- 1.1 Assess application of SEC and MSRB rules to firm activities**  
**Educate clients on implication of rules for issuers**  
**Use various resources (web, books, internal policies, etc.) to gain understanding of regulatory framework and rules**  
**Maintain records for compliance with SEC and MSRB rules**

***Knowledge Required***

- 1.1.1 Dodd-Frank anti-fraud provision**  
**1.1.2 SEC rules: *Activities requiring registration as a municipal advisor; municipal advisor recordkeeping***

***SEC Rules***

- |                           |   |
|---------------------------|---|
| <b>Exchange Act 15B</b>   | <i>Registration of municipal advisors</i>                                   |
| <b>Exchange Act 17a-3</b> | <i>Records to Be Made by Certain Exchange Members, Brokers, and Dealers</i> |
| <b>Exchange Act 17a-4</b> | <i>Records to Be Preserved by Certain Members, Brokers, and Dealers</i>     |

- 1.1.3 MSRB rules governing activities of municipal advisors (*e.g., professional qualification; fiduciary duty; recordkeeping*)**

***MSRB Rules***

- |                  |  |
|------------------|--|
| <b>Rule A-12</b> | <i>“Registration”</i>  |
| <b>Rule D-11</b> | <i>“Associated Persons”</i>  |
| <b>Rule D-13</b> | <i>“Municipal Advisory Activities”</i>   |
| <b>Rule D-14</b> | <i>“Appropriate Regulatory Agency”</i>   |
| <b>Rule G-3</b>  | <i>Professional Qualification Requirements</i>   |
| <b>Rule G-8</b>  | <i>Books and Records to Be Made By Brokers, Dealers, Municipal Securities Dealers and Municipal Advisors</i> |
| <b>Rule G-9</b>  | <i>Preservation of Records</i>   |
| <b>Rule G-17</b> | <i>Conduct of Municipal Securities and Municipal Advisory Activities</i>                                     |
| <b>Rule G-32</b> | <i>Disclosures in Connection with Primary Offerings</i>  |
| <b>Rule G-44</b> | <i>Supervisory and Compliance Obligations of Municipal Advisors</i>  |

**FUNCTION 2: Understanding Municipal Finance (35% of exam questions)**

**2.1 Identify market participants**

**Understand roles of participants in the issuance of municipal securities**

**Identify and determine the participant roles needed to complete the issuance of municipal securities**

**Develop selection criteria for participants in an issuer transaction**

**Monitor performance and completion of participant tasks in an issuer transaction**

***Knowledge Required***

- 2.1.1**     **Definitions and categories of municipal advisor professionals:** *Financial advisors, pricing consultants; investment advisers (GIC; investment of municipal bond proceeds); swap advisors; pension funds and advisors; financial feasibility consultants; appraisers; market consultants; rate consultants; solicitors (third-party marketers; placement agents)*
- 2.1.2**     **Issuer participants:** *State governments and instrumentalities (states and state treasurers; state agencies and authorities; state conduit issuers); municipal entities and instrumentalities; 501(c)(3) organizations; obligated persons (e.g., health care entities, private colleges); quasi-governmental agencies (Joint powers agencies, inter-local agencies); multi-state agencies*
- 2.1.3**     **Non-issuer participants:** *Legal (bond/issuer counsel; disclosure counsel; tax counsel; underwriter’s counsel; general/issuer’s counsel; trustees counsel; borrower’s counsel; specialized counsel; product counsel (for structured products); swap counsel); market intermediaries (broker dealers and dealer banks—underwriters, traders, placement agents, market makers; lease marketers; solicitors for investments)*
- 2.1.4**     **Credit enhancers/liquidity providers** *(bond insurer; letter of credit banks; standby purchasers for variable rate obligations; guarantors)*
- 2.1.5**     **Rating agencies** *(major (three) rating agencies; underlying ratings; absence of rating)*
- 2.1.6**     **Investors** *(retail; direct institutional (including banks, insurance companies, corporations); mutual funds and ETFs; public entities (e.g., GSEs))*
- 2.1.7**     **Trustees, paying agents and registrars**
- 2.1.8**     **Verification agents**
- 2.1.9**     **Other service providers** *(DTCC; CUSIP Service Bureau)*

**2.2 Consider possible financing solutions for municipal issuers**

**Understand benefits and risks of various financing products**

**Identify types and purpose of products**

***Knowledge Required***

- 2.2.1 Bonds:** *General obligation (limited, unlimited); revenue; special type (special tax; special assessment; moral obligation; double-barreled); tax increment/allocation financing; taxable municipal securities (Build America Bonds (BABs); other taxable municipal bonds; tax credit bonds); notes (e.g., variable rate demand obligations (VRDOs); tax anticipation notes (TANs); tax and revenue anticipation notes (TRANs); construction loan notes (CLN); tax-exempt commercial paper); leases; installment purchase agreements and certificates of participation (annual appropriation leases; abatement leases; installment purchase provisions); bank loans (securities; non-securities transactions); other funding alternatives (other federal programs; grants; state or federal appropriations; pay-as-you-go funding; bond banks and clean water*
- 2.2.2 Bond proceeds investment strategies:** *Escrow (e.g., open market, SLGS); Treasury, federal agencies, investment contracts (GICs; forward delivery agreements); money market instruments (certificates of deposit; commercial paper); investment of bond proceeds (investment suitability; investment policy of issuer; liquidity and spending schedules; indenture requirements)*
- 2.2.3 Municipal fund securities** *(Local Government Invest Pools (LGIP) and 529 College Savings Plans)*
- 2.2.4 Swaps/derivatives:** *swap markets; market participants; use of derivative products in liabilities structuring and management: types and structures (mark-to-market (MTM), fixed/floating, basis, options); applications: hedging (cash flows, future issuance); risks (basis risk, termination, collateral, counterparty); ISDA documentation: credit terms, collateral and legal provisions; suitability and use of swap advisors*
- 2.2.5 Risks associated with products:** *Types (credit risk, counterparty risk, interest rate risk; liquidity risk (for variable debt), market access risk, basis risk, political risk); issuer risk management (policies, monitoring, metrics)*

## 2.3 Perform quantitative analysis

### **Knowledge Required**

- 2.3.1 Bond valuation**
- 2.3.1.1 Security calculations and quoting conventions:** *Mathematical calculations for bonds (day count conventions, accrued interest; price vs. price plus accrued interest (clean price and dirty price); price-yield conversion (yield to maturity (YTM), yield to call (YTC), YTP, YTW, cash flow yield (CFY); dollar value of a basis point (DVO1); dollar price of 1/32<sup>nd</sup>; portfolio based yields (CFY; true interest cost (TIC); option-adjusted TIC); net interest cost (NIC); premiums and discounts; average life; arbitrage yield limit)*
- 2.3.1.2 Valuation of bonds:** *Spot rates derived from optionless yield curve; discounting of certain cash flows; valuation of call option given uncertain interest rates; new issue structuring; duration, convexity and option-based risk measures*
- 2.3.2 Refundings**

- 2.3.2.1 Refunding considerations:** *present value (PV) savings; forfeited option value; future value savings; “high to low” advance refunding; “low to high” advance refunding; other considerations (e.g., covenants)*
- 2.3.2.2 Current refunding**
- 2.3.2.3 Advance refunding:** *Net cash; full net cash; crossover*
- 2.3.3 Interest rate derivatives valuation fundamentals** *(e.g., swaps; options)*
- 2.3.4 Defeasance of bonds**

- 2.4 Monitor current interest rates and market conditions**
  - Determine optimal timing for issuer transactions**
  - Evaluate municipal supply**
  - Understand general factors affecting interest rates**

***Knowledge Required***

- 2.4.1 Monetary policy**
- 2.4.2 Fiscal policy**
- 2.4.3 Economic policy** *(e.g., supply and demand)*
- 2.4.4 Other factors affecting interest rates**



FUNCTION 3: Performing Issuer's Credit Analysis and Due Diligence (12% of exam questions)

**3.1 Review relevant financial information**

**Consider feasibility and suitability of financing plan**

**Evaluate cost and benefits of obtaining credit rating**

**Evaluate credit factors that may impact ability to access market**

**Evaluate issuer risk tolerance**

**Financial reporting and accounting**

***Knowledge Required***

**3.1.1 Governance**

**3.1.2 Economic and demographic factors**

**3.1.3 Financial information:** *budgets; financial plans*

**3.1.4 Financial statements:** *Comprehensive Annual Financial Reports (CAFR (annual audits))*

**3.1.5 Debt and liabilities**

**3.2 Components of financial statements:** *Derivative's disclosure; auditor's opinion; pension liabilities; Other Post Employment Benefits (OPEBs)*

**3.3 Performing due diligence to know your client**

**3.4 Distressed events** *(e.g., bankruptcy, default)*

FUNCTION 4: Structuring, Pricing and Executing Municipal Debt Products (31% of exam questions)

- 4.1 Define characteristics of proposed transaction**  
**Assist issuer with creation of debt model**  
**Articulate structure of proposed transaction to issuer and other participants**  
**Structure financing according to financing plan**  
**Determine need for credit enhancement (i.e., insurance)**

***Knowledge Required***

- 4.1.1 Debt service structure:** *serial, term bonds*  
**4.1.2 Legal/credit provisions**  
**4.1.3 Redemption/call/prepayment provisions**  
**4.1.4 Proceed funds commonly created:** *project/construction/acquisition fund; reserve fund; revenue fund; debt service fund*  
**4.1.5 Coverage requirements/ratios**  
**4.1.6 Additional bonds requirements**  
**4.1.7 Default provisions and remedies**  
**4.1.8 Put options/tender options**  
**4.1.9 When/how to use expert work products (e.g., feasibility consultants, etc.):** *types, issues*  
**4.1.10 Non-appropriation provisions**  
**4.1.11 Federal and state tax treatment:** *interest income; alternative minimum tax; amortization of premium/accretion of discount; capital gains/loss; taxable securities; bank qualified; de minimis rule*
- 4.2 Price negotiated bond transactions**  
**Research comparable transactions**  
**Understand factors considered in pricing**  
**Obtain indicative scales/pricing from underwriters**  
**Evaluate proposed pricing strategy (account, timing, etc.)**  
**Conduct discussions with existing and potential investors**

***Knowledge Required***

- 4.2.1 Comparable securities pricing**  
**4.2.2 Presale orders**  
**4.2.3 Effects of flipping on pricing**  
**4.2.4 Liquidity**  
**4.2.5 Market volatility**  
**4.2.6 Bank qualified vs. non-bank qualified**  
**4.2.7 Cost and value of ratings and credit enhancements**  
**4.2.8 Economic indicators**  
**4.2.9 Par/premium/discount bonds (couponing)**

**4.3 Conduct competitive sales**  
**Evaluate and determine method of sale**

***Knowledge Required***

**4.3.1 Methods of primary financing:** *public offering (competitive sale, negotiated sale); private placement; direct loans*

**4.3.2 Dealers (sales and trading):** *underwriting syndicate preliminary pricing; priority of orders; order period*

**4.4 Participate in disclosure preparation process**

***Knowledge Required***

**4.4.1 Primary sources of information:** *Notice of Sale; official statement (preliminary, final); issuer/borrower websites; new issue wires*

**4.4.2 Aggregators of information:** *EMMA (issuer/borrower information, trading/pricing information); print and electronic news services*

FUNCTION 5: Understanding Requirements Related to the Issuance of Municipal Debt (10% of exam questions)

**5.1 Monitor for arbitrage rebate compliance (ARC)**

**Assist with preparation and filing of continuing disclosure obligations**

***Knowledge Required***

- 5.1.1**      **Broker/dealer registration requirements related to loans vs. the issuance of securities**
- 5.1.2**      **Taxable vs. tax-exempt issues:** *private activity limits; private activity TEFRA requirements*
- 5.1.3**      **Issuer disclosure:** *initial offering (official statement content, municipal advisor responsibilities, underwriter's responsibilities); continuing disclosure (annual filings; event notices)*
- 5.1.4**      **Arbitrage:** *Transferred proceeds; yield restriction; rebate; tax rules for investment of proceeds; project funds (general spending exceptions and temporary periods); exception for small issuers; debt service funding limitations; record keeping requirements (time period, documents retained, document format)*

**5.2 Develop process for post-issuance compliance**

***Knowledge Required***

- 5.2.1**      **Written post-issuance policies**
- 5.2.2**      **Issuer recordkeeping**

## REFERENCE MATERIAL

The following list of reference materials has been suggested by municipal advisors as having been helpful in the performance of the job functions of a municipal advisor. It is not intended to be all-inclusive, nor is it intended to specifically represent knowledge covered on the examination.

Ballard, Frederic L. Jr., *ABCs of Arbitrage. Tax Rules for Investment of Bond Proceeds by Municipalities*. Chicago, IL: ABA Book Publishing (2011)

California Debt and Investment Advisory Commission., *California Debt Issuance Primer*.  
<http://www.treasurer.ca.gov/cdiac/debtpubs/primer.pdf>

Fabozzi, Frank J. and Steven V. Mann (ed.), *The Handbook of Fixed Income Securities. Seventh edition*. New York, NY: McGraw-Hill (2005)

Hull, John C., *Fundamentals of Futures and Options Markets*. Eighth edition. Upper Saddle River, NJ: Prentice-Hall (2013)

Internal Revenue Service. Information for the Tax Exempt Bond Community. [www.irs.gov/Tax-Exempt-Bonds](http://www.irs.gov/Tax-Exempt-Bonds)

Lamb, Robert., James Leigland, Stephen P. Rappaport, *The Handbook of Municipal Bonds and Public Finance*. New York, NY: New York Institute of Finance / Simon & Schuster (1993)

Lamb, Robert., Stephen P. Rappaport, *Municipal Bonds: The Comprehensive Review of Municipal Securities and Public Finance*. New York, NY: McGraw-Hill Companies (1987)

Marlin, George J., Joe Mysak., *The Guidebook to Municipal Bonds: The History, The Industry, The Mechanics.*, New York, NY: Thomson Financial (1991)

Mintz, Joel A., Larry Allen Bakken, Ronald H. Rosenberg. *The Fundamentals of Municipal Finance*. Chicago, IL: ABA Book Publishing (2010)

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<http://www.msrb.org/Rules-and-Interpretations/MSRB-Rules.aspx>

Mysak, Joe. *Encyclopedia of Municipal Bonds*. Hoboken, NJ: John Wiley & Sons, Inc. (2012)

Securities and Exchange Commission, Office of Municipal Securities.

<http://www.sec.gov/municipal>

SIFMA, *The Fundamentals of Municipal Bonds*. Sixth edition. Hoboken, NJ: John Wiley & Sons, Inc. (2011)

Temel, Judy Wesalo., *The Fundamentals of Municipal Bonds. Fifth Edition*. New York, NY: John Wiley & Sons, Inc. (2001)

White, Wilson., *The Municipal Bond Investment Advisor*. Chicago, IL: Probus Professional Publishing (1991)

**SAMPLE QUESTIONS**

The following questions are similar in format and content to questions on the Series 50 examination. The sample questions, however, are not intended to parallel either the level of difficulty or the subject coverage of the examination. The sample questions are only intended to assist candidates in preparing for the types of multiple-choice questions that will appear on the examination.

1. General information which may be provided to a municipal entity without being considered advice includes all of the following EXCEPT:
  - (A) Information regarding a financial institution's currently available investments
  - (B) Recommendations regarding the municipal entity's refinancing opportunities
  - (C) Current prices and yields on the municipal entity's outstanding bonds
  - (D) Comparison of the risks and advantages of variable rate debt
  
2. A municipal issuer should consider which of the following risks when executing a swap transaction?
  - I. Pension risk
  - II. Interest rate risk
  - III. Errors and omission risk
  - IV. Counterparty risk
  - (A) I and III
  - (B) I and IV
  - (C) II and III
  - (D) II and IV
  
3. A municipality issues \$60,000,000 in bonds. To avoid qualifying the bonds as private activity bonds, the maximum amount of bond proceeds that can be used to make or finance loans cannot exceed:
  - (A) \$3,000,000
  - (B) \$5,000,000
  - (C) \$6,000,000
  - (D) \$10,000,000
  
4. A city is considering Other Post Employment Benefits (OPEB) bonds. Which of the following best describes how the city determines its Net Other Post Employment

Benefits Obligation (NOO) to conform to Governmental Accounting Standards Board rules?

- (A) Annual Required Contribution (ARC) – actual contribution = NOO
- (B) ARC + actual contribution = NOO
- (C) ARC – NOO = actual contribution
- (D) ARC + NOO = actual contribution

5. A municipal revenue bond has a net revenue pledge. From the debt service reserve fund, the flow of funds then goes into which fund?

- (A) Debt service fund
- (B) Operations and maintenance fund
- (C) Renewal and replacement fund
- (D) Revenue fund

**ANSWERS**

- 1. (B)
- 2. (D)
- 3. (A)
- 4. (A)
- 5. (C)