LO.a: Describe classifications of global fixed-income markets.

1. A fixed income security has an original maturity of 1 year and a credit rating of BBB. The *most accurate* description of the security is:
   A. money market security and junk bond.
   B. capital market security and investment grade.
   C. money market security and investment grade.

2. Any rating below BBB by Standard & Poor's (S&P) is *least likely* to be referred to as:
   A. junk grade.
   B. low yield grade.
   C. speculative grade.

3. Which of the following principal repayment structures allows for retirement of bond on an annual basis through a random drawing?
   A. Serial maturity structure.
   B. Sinking fund arrangement.
   C. Term maturity structure.

4. The interest rate of a security is adjusted periodically as per inflation. This is *most likely* a (n):
   A. floating rate bond.
   B. index-linked bond.
   C. inflation rate bond.

5. Inflation-linked bonds are structured in a way that:
   A. inflation adjustment is made via the coupon payments.
   B. inflation adjustment is made via the principal repayment.
   C. inflation adjustment is made via the coupon payments, principal repayment, or both.

6. Which of the following is *least likely* an issuer of bonds?
   A. Supranational organizations.
   B. Pension fund.
   C. Local government.

7. Analyst 1: Non-sovereign government bonds are bonds issued by agencies that are owned by governments.
   Analyst 2: Non-sovereign government bonds are bonds issued by an international organization such as World Bank.
   Which analyst's statement is *most likely* correct?
   A. Analyst 1.
   B. Analyst 2.
   C. Neither.

8. A fixed-income security issued with a maturity at issuance of five months is *most likely* classified as a:

A. securitized investment.
B. money market security.
C. capital market security.

9. Which of the following is *least likely* to be an advantage of Eurobonds in comparison to domestic or foreign bonds?
   A. The Eurobond market is characterized by less reporting and regulatory constraints.
   B. Eurobonds are subject to lower taxation in comparison to domestic and foreign bonds.
   C. Eurobond issuers are exposed to less interest rate risk.

10. The price of a bond issued in Singapore by an American company and denominated in Singaporean dollars is *most likely* to:
    A. change as Singapore's interest rates change.
    B. change as U.S interest rates change.
    C. be unaffected by changes in U.S. and Singaporean interest rates.

11. Analyst 1: A bond issued internationally, outside the jurisdiction of the country in whose currency the bond is denominated, is best described as a foreign bond.
    Analyst 2: A bond issued internationally, outside the jurisdiction of the country in whose currency the bond is denominated, is best described as a Euro bond.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

LO.b: Describe the use of interbank offered rates as reference rates in floating-rate debt.

12. Libor rates reflect rates at which a select set of banks believe they could borrow unsecured funds from other banks in the London interbank market for different currencies and different borrowing periods ranging from:
    A. overnight to six months.
    B. overnight to one year.
    C. overnight to ten years.

13. A European country issued floating rate bonds denominated in U.S. dollars that pay coupons quarterly. The *most likely* reference rate of this bond is:
    A. U.S. dollar 12 month Libor.
    B. Euro 3 month Libor.
    C. U.S. dollar 3 month Libor.

14. Which of the following statements is the *most accurate*?
    A. Interbank offered rates are best described as the rates at which major banks can borrow from other major banks against some form of collateral.
    B. Interbank offered rates are best described as the rates at which major banks can issue short-term debt.

C. Interbank offered rates are best described as the rates at which major banks can borrow unsecured funds from other major banks.

15. A company issues floating-rate bonds. The coupon rate is expressed as the six-month Libor plus a spread. The coupon payments are *most likely* to increase as:
    A. the spread increases.
    B. Libor increases.
    C. the company's credit quality decreases.

LO.c: Describe mechanisms available for issuing bonds in primary markets.

16. A company wants to ensure that its entire bond issue is sold. The *most appropriate* option for the company is:
    A. best effort offering.
    B. underwriting offering.
    C. shelf registrations.

17. Which of the following statements is *most likely* to be correct about bond issuance?
    Statement I: Public offerings and private placements are two mechanisms of issuing bonds in a primary market.
    Statement II: Shelf registrations are a form of private placements.
    Statement III: An auction is a public offering method that involves bidding.
    A. Statements I and II.
    B. Statements I and III.
    C. Statements II and III.

18. What is the role of investment banks in a best effort offering for a bond issue?
    A. Buying the unsold portion of the issue.
    B. Selling bonds on a commission basis.
    C. Buying the unsold portion of the issue at a premium price.

19. Which of the following options will a company *most likely* select to save repeated costs related to issuing additional bonds?
    A. Auction.
    B. Shelf registration.
    C. Best effort offering.

20. Which of the following statements is *least accurate*?
    A. In a primary market, bonds are issued for the first time to raise capital.
    B. A primary market has a specific location where the trading of bonds takes place.
    C. In a secondary market, existing bonds are traded among individuals and institutions.

21. Which of the following statements is *most accurate*?
    A. U.S. Treasury bonds are typically sold to the public via an auction.
    B. U.S. Treasury bonds are typically sold to the public via a primary dealer.
    C. U.S. Treasury bonds are typically sold to the public via a secondary bond market.

22. In a single-price bond auction, an investor who places a competitive bid and specifies a rate that is lower than the rate determined at auction will *most likely*:
    A. not receive any bonds.
    B. receive the bonds at the rate determined at auction.
    C. receive the bonds at the rate specified in the investor's competitive bid.

LO.d: Describe secondary markets for bonds.

23. An investor wants to buy bonds of Rex Inc. in the secondary market. He notices that the bonds have a high bid-ask spread. This *most likely* indicates that:
    A. the bonds have high liquidity.
    B. the bonds have low liquidity.
    C. the bonds are overvalued.

24. Analyst 1: Usually, the settlement for corporate bonds takes place on the third trading day after the trade date. For government bonds it takes place on the next trading day after the trade date. For money market securities it takes place on the day of trade itself.
    Analyst 2: Usually, the settlement for government bonds takes place on third trading day after the trade date. For corporate bonds it takes place on the next trading day after the trade date. For money market securities it takes place on the day of trade itself.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

25. Which of the following *best* describes a secondary market for bonds? A market:
    A. in which bonds are issued for the first time to raise capital.
    B. in which auction process is used to determine prices.
    C. in which existing bonds are traded among individuals and institutions.

26. Which of the following statements is *most likely* to be correct regarding secondary bond markets?
    A. Secondary bond markets are only structured as organized exchanges where buyers and sellers meet to arrange their trades.
    B. Settlement, a process that occurs after trade is made, is T+1 typically for corporate bonds.
    C. The greater the bid-ask spread, the greater the bond's illiquidity.

27. A bond purchased in a primary market is *least likely* to be purchased from:
    A. the bond's issuer.
    B. the bond's lead underwriter.
    C. another investor in the bond.

28. Government bonds will *least likely* settle on the:
    A. trade date.
    B. trade date plus one day.

C. trade date plus three days.

LO.e: Describe securities issued by sovereign governments.

29. Which of the following statements is *most* accurate?
    A. Quasi-government bonds are issued by local governments.
    B. Sovereign bonds are issued by national governments.
    C. Non-sovereign government bonds are issued by government sponsored entities.

30. Which of the following describes an on-the-run sovereign security?
    A. Continuously issued bonds by the government.
    B. Recently issued bonds by the government.
    C. Scarcely issued bonds by the semi-government institutions.

31. Analyst 1: Sovereign bonds with a maturity at issuance shorter than one year are most likely floating rate bonds.
    Analyst 2: Sovereign bonds with a maturity at issuance shorter than one year are most likely zero coupon bonds.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

32. Which of the following statements is *most accurate*?
    A. Floating-rate bonds are issued by national governments as the best way to reduce credit risk.
    B. Floating-rate bonds are issued by national governments as the best way to reduce inflation risk.
    C. Floating-rate bonds are issued by national governments as the best way to reduce interest rate risk.

33. Sovereign bonds with no stated maturity date are *most likely* known as:
    A. linkers.
    B. floaters.
    C. consols.

LO.f: Describe securities issued by non-sovereign governments, quasi-government entities, and supranational agencies.

34. Speedy Rail Services is a government sponsored entity that issues bonds. This is *most likely* to be classified as a bond issued by a:
    A. quasi-government entity.
    B. sovereign government entity.
    C. supranational entity.

35. Haley owns a non-sovereign bond, while James owns a sovereign bond. If the two bonds have similar characteristics, Haley's security is *least likely* to have:
    A. greater liquidity.
    B. higher yield.
    C. lower price.

36. A state government issued bonds to fund a highway construction project. The cash-flow of these bonds is backed by the projected income from this project. This bond is *most likely* a:
    A. sovereign bond.
    B. non-sovereign bond.
    C. quasi government bond.

37. Government of Japan created a special entity to boost the technology sector. The entity issued bonds to raise capital. What type of bonds are these? Will they offer the same yield as the sovereign bonds?
    A. Agency bonds, they will have higher yields.
    B. Non-sovereign bonds, they will have lower yields.
    C. Supranational bonds, they will have higher yields.

38. A bond issued by a multilateral agency such as the Asian Development Bank is *best* described as a:
    A. sovereign bond.
    B. supranational bond.
    C. quasi-government bond.

39. Compared to non-sovereign bonds, sovereign bonds with similar characteristics *most likely* trade at a yield that is:
    A. lower.
    B. the same.
    C. higher.

40. Analyst 1: Most bonds issued by a governmental agency are repaid from the cash flows generated by the agency.
    Analyst 2: All bonds issued by a governmental agency are guaranteed by the national government that sponsored the agency.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Both.

LO.g: Describe types of debt issued by corporations.

41. Which of the following statements is *most accurate*?
    A. Generally, companies use commercial paper as a bridge financing instrument and the interest cost is higher than a bank loan.

B. Generally, companies use commercial paper as a bridge financing instrument and the interest cost is lower than a bank loan.
C. Generally, companies use syndicated loan as bridge financing instrument and the interest cost is lower than bank loan.

42. A short term unsecured security that is used by companies as a source of short-term and bridge financing is *most likely* to be known as:
A. bilateral loan.
B. commercial paper.
C. syndicated loan.

43. Some form of collateral is pledged to ensure the payment of debt for:
A. highly rated sovereign bonds.
B. secured corporate debt.
C. unsecured corporate debt.

44. Many issuers roll over their commercial papers on a regular basis. To reduce roll over risk they are usually required to:
A. have sufficient T-bills as collateral.
B. apply for a bilateral loan.
C. maintain backup lines of credit with banks.

45. A company issued bonds where a stated number of bonds will mature each year before maturity. These bonds *most likely* have a :
A. term maturity.
B. serial maturity.
C. sinking fund provision.

46. A loan made by a bank to a private company is *most likely* a:
A. bilateral loan.
B. syndicated loan.
C. private placement.

47. Which of the following statements relating to commercial paper is *most accurate*?
A. Companies use commercial paper only for funding working capital.
B. Companies use commercial paper only as an interim source of financing.
C. Companies use commercial paper both for funding working capital and as an interim source of funding.

48. Which of the following is *least likely* to be the reason for a higher yield on commercial papers?
A. Lower credit risk in comparison to highly rated sovereign bonds.
B. Lower liquidity in comparison to short term sovereign bonds.
C. Tax reasons in comparison to short-term municipal bonds.

49. Maturities of Euro-commercial paper range from:

A. overnight to six months.
B. overnight to one year.
C. six months to one year.

50. A pure discount bond is *least likely* to be classified as a:
    A. floating rate bond.
    B. fixed rate bond.
    C. zero coupon bond.

51. A bond issue that has a random number of bonds that mature and are paid off each year before final maturity *most likely* has a:
    A. term maturity.
    B. serial maturity.
    C. sinking fund arrangement.

52. Analyst 1: A Eurocommercial paper is typically issued at an interest-bearing basis, while a U.S. commercial paper is typically issued on a discount-basis.
    Analyst 2: A Eurocommercial paper is typically issued at a discount basis, while a U.S. commercial paper is typically issued on an interest-bearing basis.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

LO.h: Describe short-term funding alternatives available to banks.

53. Analyst 1: A non-negotiable certificate of deposit has a penalty for early withdrawal of funds.
    Analyst 2: A negotiable certificate of deposit has a penalty for early withdrawal of funds.
    Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

54. Which of the following is *not* considered a retail fund?
    A. Money market accounts.
    B. Certificate of deposits.
    C. Checking accounts.

55. Which of the following certificates of deposit (CD) allows an investor to sell the CD in the open market prior to the maturity date?
    A. Negotiable certificate of deposit.
    B. Non-negotiable certificate of deposit.
    C. Negotiable and non-negotiable certificate of deposit.

56. Analyst 1: Central bank fund market is a market where banks borrow from and lend to the central bank. The rate at which these transactions take place is called repo rate.
Analyst 2: Central bank fund market is a market where banks lend to and borrow from each other. The rate at which these transactions take place is called central bank funds rate.
Which analyst's statement is *most likely* correct?
    A. Analyst 1.
    B. Analyst 2.
    C. Neither.

57. Which of the following statements is *most accurate*?
    A. Negotiable CDs are open for yield negotiation and adjustment while nonnegotiable CDs are not open for yield negotiation and adjustment.
    B. Negotiable CDs can be sold while nonnegotiable CDs cannot be sold.
    C. Negotiable CDs are open for negotiation of maturity period while nonnegotiable CDs are not open for such negotiation.

58. Which of the following is *most likely* considered wholesale funds?
    A. Money market accounts.
    B. Central bank funds.
    C. Repurchase agreements.

59. Short term wholesale funds are *least likely* to include:
    A. central bank funds.
    B. demand deposits.
    C. interbank funds.

60. Which of the following statements is *most accurate*?
    A. Holding reserves with the central bank is a requirement for banks in all countries.
    B. Holding reserves with the central bank is an opportunity cost for banks.
    C. Holding reserves with the central bank is an opportunity to receive interest on excess funds for banks.

LO.i: Describe repurchase agreements (repos) and the risks associated with them.

61. Which of the following statements is *most accurate*?
    A. A repurchase agreement is like an interbank deposit.
    B. A repurchase agreement is like a collateralized loan.
    C. A repurchase agreement is like a negotiable certificate of deposit.

62. Party A sells a 90-day T-bill to Party B for $99.85 with a commitment to by the T-bill back the next day for $99.87. From the perspective of Party B this transaction can be referred to as a:
    A. repo agreement.
    B. reverse repo agreement.
    C. forward rate agreement.

63. The level of repo margin is lower when:
    A. the length of the repurchase agreement is high.
    B. the supply of the collateral is low.
    C. the quality of the collateral is low.

64. The sale of a security with a simultaneous agreement by the seller to purchase the same security back from the purchaser at an agreed-on price and future date is *most likely* to be known as:
    A. central bank funds.
    B. certificate of deposit.
    C. repurchase agreement.

65. If the repurchase agreement is for more than one day, it is *most likely* to be known as:
    A. overnight repo.
    B. repo to maturity.
    C. term repo.

66. Which of the following is *least likely* to be correct about repo rates?
    A. Repo rates are typically lower for highly rated collaterals.
    B. Repo rates generally increase with maturity.
    C. Repo rates are generally higher when a delivery of the collateral to the lender is required.

67. The repo rate is higher when:
    A. the credit quality of the borrower is high.
    B. the interest rates for alternative sources of funds are high.
    C. the collateral security is delivered to the lender.

68. Which of the following statements is *most accurate*?
    A. The interest rate on a repurchase agreement is known as repo rate.
    B. The interest rate on a repurchase agreement is known as repo yield.
    C. The interest rate on a repurchase agreement is known as repo margin.

Solutions

1. C is correct. A security with an original maturity of one year or less is a money market security. A security with a credit rating of BBB or higher is investment grade.

2. B is correct. The rating below BBB by Standard & Poor's is known as junk, high yield, speculative, or non-investment grade.

3. B is correct. A sinking fund arrangement allows for the retirement of bond on an annual basis based on a random drawing. A serial maturity structure, a stated number of bonds mature and are paid off each year before final maturity. A term maturity structure allows for one lump sum payment at maturity.

4. B is correct. Any bond that is aligned with an index or inflation is called index-linked bonds.

5. C is correct. Inflation-linked bonds can be structured in a variety of ways; the inflation adjustment can be made via the coupon payments, the principal repayment, or both.

6. B is correct. Pension funds are typically investors in, not issuers of, bonds. A and C are incorrect because major issuers of bonds include sovereign (national) governments, non-sovereign (local) governments, quasi-government agencies, supranational organizations, and financial and non-financial companies.

7. C is correct. Non-sovereign (local) government bond issuers include provinces, regions, states, and cities. Analyst 1 is incorrect because quasi-government bonds are issued by agencies that are either owned or sponsored by governments. Analyst 2 is incorrect because supranational bonds are issued by international organizations.

8. B is correct. Money market securities are issued with a maturity at issuance (original maturity) ranging from overnight to one year. A is incorrect because securitization does not relate to a bond's maturity, but to the process that transforms private transactions between borrowers and lenders into securities traded in public markets. C is incorrect because capital market securities are issued with an original maturity longer than one year.

9. C is correct. The interest rate risk does not differ for Eurobonds, foreign bonds, or domestic bonds. Thus, this is not an advantage.

10. A is correct. The currency denomination of a bond's cash flows influences which country's interest rates affect a bond's price. The price of a bond issued by an American company and denominated in Singaporean dollars will be affected by Singapore's interest rates.

11. B is correct. Eurobonds are issued internationally, outside the jurisdiction of any single country. Foreign bonds are issued in a specific country, in the currency of that country, by an issuer domiciled in another country.

12. B is correct. The borrowing periods corresponding to LIBOR range from overnight to one year.

13. C is correct. For floating rate bonds denominated in U.S. dollars the reference rate is usually the U.S. dollar Libor. If coupons are paid quarterly the reference rate will usually be the U.S. dollar 3 month Libor.

14. C is correct. Interbank offered rates represent a set of interest rates at which major banks believe they could borrow unsecured funds from other major banks in the interbank money market for different currencies and different borrowing periods ranging from overnight to one year.

15. B is correct. The coupon payments on a floating-rate bond that is tied to the six-month Libor will reset every six months, based on changes in Libor. Thus, as Libor increases, so will the coupon payments. A is incorrect because the spread on a floating-rate bond is typically

constant; it is set when the bond is issued and does not change afterward. C is incorrect because the issuer's credit quality affects the spread and thus the coupon rate that serves as the basis for the calculation of the coupon payments, but only when the spread is set—that is, at issuance.

16. B is correct. In an underwriting offering, the investment bank buys the whole issue from the issuer and takes the risk of reselling it to investors or dealers.

17. B is correct. Statement I and III are correct. Statement II is incorrect because shelf registration is a form of public offering.

18. B is correct. In best effort offering, the investment bank sells the bond on commission basis. Contrary to an underwritten offering, where the investment bank commits to selling 100% of the issue, in a best effort offering issue, it only sells as many securities as it can.

19. B is correct. In shelf registration, the issuer is able to offer additional bonds without preparing a new and separate offering circular each time. This saves repeated administrative expenses and registration fees.

20. B is correct. Options A and C are the definitions of primary and secondary markets respectively. Option B is the correct answer, because having a specific location where the trading of bonds takes place is not a requirement of primary markets.

21. A is correct. Treasury bonds are typically sold to the public via an auction. B is incorrect because primary dealers are often bidders in the auction; they are financial institutions that are active in trading U.S. Treasury bonds. C is incorrect because any bond issue coming directly to the market is considered to be in the primary, not the secondary, market.

22. B is correct. In a single-price bond auction, a bidder that enters a competitive bid specifies the rate (yield) that is considered acceptable. If the rate specified in the competitive bid is lower than the coupon rate determined at auction, the investor will receive the bonds. All winning bidders pay the same price at the rate determined at the auction.

23. B is correct. In the secondary market, Bid-ask spreads reflects the liquidity of a market. The lower the spread, the better the liquidity.

24. A is correct. Usually, corporate bonds have T + 3 settlement, government bonds T + 1 settlement, and money market securities are settled on the day of the trade itself.

25. C is correct. A market in which existing bonds are traded among individuals and institutions is the definition of a secondary market. A is incorrect because primary bond markets are markets in which bonds are issued for the first time to raise capital. B is incorrect because having an auction to determine prices is not a requirement for a secondary bond market.

26. C is correct. The greater the bid-ask spread, the less the liquidity of the bond, hence the greater the illiquidity of the bond. A is incorrect because secondary bond markets can either

be organized exchanges or over the counter markets. B is incorrect because the settlement date for corporate bonds is on a T+3 basis.

27. C is correct. In secondary bond markets, bonds are traded among investors. A and B are incorrect because a bond purchased from the bond's issuer or from the bond's lead underwriter would happen in the primary, not secondary, market.

28. C is correct. Corporate bonds typically settle on a T + 3 basis—that is, three days after the transaction date. A is incorrect because cash settlement occurs for some government and quasi-government bonds and for many money market trades. B is incorrect because settlement on a T + 1 basis is typical for government.

29. B is correct. Bonds issued by the government of a country are sovereign bonds. Options A and C are incorrect, they have the respective descriptions interchanged.

30. B is correct. Sovereign bonds are securities issued by the government. On-the-run refers to securities that have been issued recently.

31. B is correct. Most bonds issued by national governments with a maturity at issuance (original maturity) shorter than one year are zero-coupon bonds.

32. C is correct. The coupon rates of floating-rate bonds are reset periodically based on changes in the level of a reference rate such as Libor, which reduces interest rate risk. A is incorrect because credit risk, although low for sovereign bonds, cannot be reduced by linking the coupon rate to a reference rate. B is incorrect because although the inflation risk is lower for floating-rate bonds than for fixed- rate bonds, floating-rate bonds are not as good as inflation-linked bonds to reduce inflation risk.

33. C is correct. Consols are sovereign bonds with no stated maturity date issued by the U.K. government. Sovereign bonds whose coupon payments and/or principal repayment are adjusted by a consumer price index are known as inflation-linked bonds or linkers. Floaters describe floating-rate bonds that have a coupon rate tied to a reference rate such as Libor.

34. A is correct. Quasi-government entities are owned or sponsored by the government and usually include rail services or utilities.

35. A is correct. Non-sovereign bonds usually trade at a higher yield and lower price than sovereign bonds with similar characteristics. The higher yield can be a consequence of non-sovereign bonds being less liquid than the sovereign bonds.

36. B is correct. A bond issued by local government to fund a specific project is called a Non-sovereign bonds.

37. A is correct. The bonds issued by an entity set up by the government for some special purpose are called agency bonds. These bonds typically offer a higher yield than the sovereign bonds.

38. B is correct. Bonds issued by multilateral agencies are called supranational bonds.

39. A is correct. Non-sovereign bonds usually trade at a higher yield and lower price than sovereign bonds with similar characteristics. The higher yield is because of the higher credit risk associated with non-sovereign issuers relative to sovereign issuers. The higher yield may also be a consequence of non-sovereign bonds being less liquid than sovereign bonds with similar characteristics.

40. A is correct. Most bonds issued by a governmental agency are repaid from the cash flows generated by the agency or from the project the bond issue is financing. Some bonds issued by governmental agencies are guaranteed by the national government that sponsored the agency; bonds are most likely repaid first from the cash flows generated by the agency.

41. B is correct. Bridge financing is used to bridge the gap until an organization issues long term debt. Generally, companies use commercial paper as bridge financing instrument. The interest cost is lower with commercial paper than with a bank loan.

42. B is correct. Commercial paper is a short term unsecured security that is used by companies as a source of short-term and bridge financing.

43. B is correct. In case of secured corporate debt, some form of collateral is pledged to ensure the payment of the debt. In case of unsecured debt, claims are settled by the general assets of the company. Highly rated sovereign bonds are not exposed to great credit risk.

44. C is correct. Under backup lines of credit, the bank provides fund when the commercial paper matures.

45. B is correct. A bond issue under which a stated number of bonds will mature each year before maturity is called a serial maturity bond issue.

46. A is correct. A bilateral loan is a loan from a single lender to a single borrower. B is incorrect because a loan from a group of lenders to a single borrower is a syndicated loan. C is incorrect because a private placement involves placing the debt issued by a borrower directly with a lender or a group of lenders. The fact that the borrower is a private company is irrelevant.

47. C is correct. Companies use commercial paper as a source of funding working capital and seasonal demand for cash, as well as an interim source of financing until permanent financing can be arranged.

48. A is correct. A commercial paper has greater yield in comparison to highly rated sovereign bonds because of greater exposure to credit risk rather than a greater tenor.

49. B is correct. Euro commercial paper ranges in maturity from overnight to 364 days.

50. A is correct. Pure discount bonds are also called zero coupon bonds. They are certainly not floating rating rate bonds.

51. C is correct. A sinking fund arrangement, like a serial maturity structure, results in a portion of the bond issue being paid off every year. However, with a serial maturity structure, the bonds are paid off because the maturity dates are spread out during the life of the bond and the bonds that are retired are maturing; the bondholders know in advance which bonds will be retired. In contrast, the bonds retired annually with a sinking fund arrangement are designated by a random drawing. A is incorrect because a bond issue with a term maturity structure is paid off in one lump sum at maturity.

52. A is correct. A Eurocommercial paper is typically issued at an interest-bearing basis, while a U.S. commercial paper is typically issued on a discount-basis.

53. A is correct. In a non-negotiable CD, the interest and deposit are paid at maturity. There is a penalty if the depositor withdraws funds before maturity.

54. B is correct. Certificate of deposits are wholesale funds, whereas money market accounts and checking accounts are retail funds.

55. A is correct. Negotiable CD allows an investor to sell the CD in the open market prior to the maturity date.

56. B is correct. Banks are required to maintain a certain amount of money with central bank. They can lend or borrow this money to maintain this balance. This market is called central bank fund market. The rate at which these transactions take place is called central bank funds rate.

57. B is correct. Negotiable CDs can be sold to others while nonnegotiable CDs cannot be sold.

58. B is correct. Wholesale funds refer to the funds that financial institutions lend to and borrow from each other. They include central bank funds, interbank funds, and certificates of deposit.

59. B is correct. Short term wholesale funds do not include demand deposits. Demand deposits are part of retail deposits.

60. B is correct. Funds held in reserve with the national central bank are an opportunity cost because they cannot be invested with higher interest or loaned out to consumers or commercial enterprises. A is incorrect because although many countries require deposit-taking banks to place a reserve balance with the national central bank, this is not always the case. C is incorrect because some central banks pay no interest on reserve funds, and sometimes even charge for keeping reserve funds.

61. B is correct. A repurchase agreement can be viewed as a collateralized loan where the security sold and subsequently repurchased represents the collateral posted. Interbank deposits and certificate of deposits are unsecured loans and have no collateral involved.

62. B is correct. Party A is borrowing and Party B is lending. From Party B's perspective this is a reverse repo.

63. B is correct. The repo margin is lower when the underlying collateral is in short supply or if there is a high demand for it.

64. C is correct. A repurchase agreement or repo is the sale of a security with a simultaneous agreement by the seller to purchase the same security back from the purchaser at an agreed-on price and future date.

65. C is correct. A repurchase agreement for one day is called an overnight repo. A repurchase agreement for more than one day is called a term repo. A repurchase agreement lasting until maturity date is known as a repo to maturity.

66. C is correct. For the delivery requirement of the collateral, repo rates are generally lower when a delivery to the lender is required.

67. B is correct. The repo rate is:
    - higher, the longer the repo term.
    - lower, the higher the credit quality of the collateral security.
    - lower when the collateral security is delivered to the lender.
    - higher when the interest rates for alternative sources of funds are higher.

68. A is correct. The repo rate is the interest rate on a repurchase agreement. B is incorrect because the interest on a repurchase agreement is known as the repo rate, not repo yield. C is incorrect because the repo margin refers to the difference between the market value of the security used as collateral and the value of the loan.