# 7.02 Fixed-Income Cash Flows and Types

**Question 1**
The original issue discount tax provision *most likely* applies to a(n):
A. floating-rate note.
B. index-linked bond.
C. zero-coupon bond.

**Question 2**
Which of the following statements is *most accurate* regarding convertible bonds?
A. The conversion value equals the conversion price multiplied by the conversion ratio.
B. The issuer pays higher coupon rates relative to an otherwise similar option free bond.
C. The value of the issuer's straight bond provides a price floor for its convertible bond price.

**Question 3**
A five-year amortizing bond has a face value of $1,000. If it was issued at par with a yield-to-maturity of 5.18% and pays investors $160 annually at the end of Years 1 through 4, the total payment in Year 5 is *closest* to:
A. $360
B. $532
C. $560

**Question 4**
Which of the following statements *least likely* applies to an original issue discount (OID) bond on an annual basis?
A. Income is taxable.
B. The bond's cost basis increases.
C. Unrealized capital gains are taxable.

**Question 5**
A company issued a 2-year bond and chose not to make cash interest payments prior to maturity. Instead, the company elected to add additional debt to the principal amount each period. The company payed off the full principal at maturity. This type of bond is *best* described as a:
A. convertible.
B. payment-in-kind.
C. deferred coupon.

**Question 6**
If interest rates fall, which of the following is *most likely* to occur with respect to a callable bond prior to maturity?
A. The issuer will buy back the bond at a price below par.
B. The issuer will buy back the bond at a predetermined price.
C. The bondholder will buy back the bond at a predetermined price.

**Question 7**
Three bonds are identical in all respects except for their call provisions:
- Bond X has an embedded Bermuda-style call
- Bond Y has an embedded American-style call
- Bond Z has an embedded European-style call

All else being equal, which bond should have the highest yield?
A. Bond X
B. Bond Y
C. Bond Z

**Question 8**
A bond indenture is *least likel*y to include:
A. Covenants
B. Credit ratings
C. Contingency provisions

**Question 9**
A bond with a face value of £1,000 is convertible into shares of the issuer's common stock at £40 per share. If the current price of the stock is £30 per share and the current price of the bond is £950, the bond's conversion ratio is *closest* to:
A. 23.75
B. 25.00
C. 33.33

**Question 10**
A bond issued by New York City, denominated in USD, and sold only in Canada and Mexico is *most likely* a:
A. Eurobond.
B. global bond.
C. sovereign bond.

**Question 11**
An investment-grade corporate bond issuer needs capital to fund a project that will not produce cash flow for several years. If the issuer wishes to align coupon payments with the project cash flows, which of the following bond coupon structures *best* fits this need?
A. Step-up
B. Deferred
C. Payment-in-kind

**Question 12**
All else being equal, for an issuer selling 10-year bonds, which of the following *most likely* requires the highest yield at issuance? A bond that is:

A. putable.
B. callable.
C. convertible.

**Question 13**
A one-year bond is issued with the following characteristics:

| **Coupon Changes on Call Dates, Callable Quarterly** | |
|---|---|
| Initial coupon | 1.00% |
| Second coupon | 1.25% |
| Third coupon | 1.50% |
| Final coupon | 1.75% |

This coupon structure is *best* described as:
A. step up.
B. floating rate.
C. Bermuda style.

**Question 14**
One year after it was issued, an investor purchases a tax-exempt, coupon-paying bond for less than its face value and holds it to maturity. The *most likely* tax consequence for the taxpayer is:
A. income tax but no capital gains tax.
B. no income tax but capital gains tax.
C. neither income tax nor capital gains tax.

**Question 15**
When interest rates are increasing, which of the following types of bonds is *most likel*y to increase in value?
A. Callable
B. Index-linked
C. Payment-in-kind

**Question 16**
Which of the following bonds is *most likely* to be considered a domestic bond? A bond that is:
A. issued by a US company, denominated in EUR, and sold in Australia.
B. issued by a US-based subsidiary of a Japanese company, denominated in USD, and sold in the US.
C. issued by a British company, denominated in GBP, and sold in the UK, Japan, and South America.

**Question 17**
A bond indenture specifies that the coupon rate will increase by 30 basis points (bps) every time the issuer receives a downgrade. This bond
is most likely a:
A. floating rate note.
B. step-up coupon bond.
C. credit-linked coupon bond.

**Question 18**
A floating-rate bond that has regularly scheduled increases in coupon rates and helps mitigate the impact of inflation on investors is *most appropriately* classified as a(n):
A. inflation-linked bond.
B. step-up coupon bond.
C. deferred coupon bond.

**Question 19**
50,000 bonds with a 15-year maturity were issued 10 years ago and are currently trading at 110. The indenture contains a sinking fund provision that retires 10% of the outstanding bonds every year for the next four years (starting now). If an investor bought 500 bonds at issuance,
which of the following is the *best* outcome for the investor this year?
A. All bonds are redeemed.
B. 50 bonds are redeemed.
C. No bonds are redeemed.

**Question 20**
For the bondholder, a sinking fund arrangement *most likely* results in:
A. more reinvestment risk.
B. more exposure to credit risk.
C. a larger balloon payment at maturity.

**Question 21**
Which of the following statements concerning putable bonds is *most* accurate?
A. A put provision benefits the issuer when interest rates fall.
B. A put provision benefits the bondholder when interest rates rise.
C. A putable bond trades at a lower price than an otherwise similar option-free bond.

**Question 22**
A company issues a callable 10-year corporate bond with the following characteristics:

| | **Corporate callable bond** | **Comparable government bond** |
|---|---|---|
| Coupon (%) | 5.00 | 3.50 |
| Current YTM (%) | 5.50 | 3.00 |

The bond has a make-whole provision with a 40-basis-point call spread. If this bond is called, the unpaid coupons and principal will be discounted at a rate *closest* to:
A. 2.9%
B. 3.4%
C. 5.4%

**Question 23**
The biggest determinant of market yields on US dollar-denominated emerging market sovereign debt issued in the Eurobond markets is:
A. euro interest rates.
B. US dollar interest rates.
C. the emerging market's domestic interest rates.

**Question 24**
Assuming there are no changes in the credit risk of the issuer, an increase in the volatility of interest rates will *least likely* have an impact on the price of a:
A. putable bond.
B. callable bond.
C. floating rate note.

**Question 25**
A government agency issues a one-year, 3% coupon bond at par on June 30, 20X0. The bond is callable in whole or in part at:

| Call date | Price |
| --- | --- |
| September 30, 20X0 | 101.00 |
| December 31, 20X0 | 100.50 |
| March 31, 20X1 | 100.00 |

The call provision is *best* described as:
A. Bermuda style.
B. American style.
C. European style.