Solution:

Since the bond is offered at 3% semi-annually when the market rate is 5%, this means that the bond is offered at a discounted price.

To do accounting for it, let us calculate the present value of this bond under the given circumstances.

To do the calculation, let us split the bond's provisions into two broad categories and add them:

- The payment part:

  The bond will pay $100,000 x 0.03 = $3,000 semi-annually for 10 payments (since payments are done semi-annually for 5 years).

  Thus, the PV of this is like an annuity with the above and by using the tables, we get the present value as $3,000 x 7.7217 = $23,165.1

- The lump-sum part:

  The bond will pay $100,000 after 10 payments, at a compounding rate of 3%.

  Thus, the PV of this is given by $100,000 x 0.6139 = $61,390

The present value of this, comes out to be $23,165.1 + $61,390 = $84,555.1 for the same.

(1)

Under the U.S. GAAP, the convertible bonds are treated as normal bonds.

Thus, we see that the issuance of bonds under the U.S. GAAP is given as follows:

JOURNAL ENTRY FOR ISSUANCE OF BOND
(Amounts are in $)

Name: Brock Company

Date	Particulars	Debit	Credit
January 1, 2010	Cash	100,000.0	
	To Bond Payable		100,000.0
	(Being issuance of the bonds.)		

(2)

Under the IFRS method, the bond is treated at a discounted price, and we get the following accounting for the same:

JOURNAL ENTRY FOR ISSUANCE OF BOND
(Amounts are in $)

Name: Brock Company

Date	Particulars	Debit	Credit
January 1, 2010	Cash	100,000.0	
	To Bond Payable		84,555.1
	To Equity Conversion of Bonds		15,445.9
	(Being issuance of the bonds.)		

The bond has been broken down into the debt as well as the equity conversion part.