

Solution:

(1)

To calculate the proceeds from the issuance of the debentures, we need to calculate the present value of the bond. To do this, we can split the valuation of the bond into two parts:

- **Payment Part:**

The bond offers to pay $\$6 \times 5\% = \0.3 million per period. The payment will be done for 10 periods.

To find the present value of this, we note that this is like an annuity that is being offered at 4% per period.

By using the annuity tables, we see that the present value of these payments will be $\$0.3 \times 8.1109 = \2.433 million.

- **Lumpsum Part:**

The bond offers to pay \$6 million at the maturity.

Since this is paid after 10 periods, and the present rate is 4% per period, the present value comes out to be $\$6 \times 0.6756 = \4.054 million.

Thus, the present value of these debentures comes out to be $\$2.433 + \$4.054 = \mathbf{\$6.477 \text{ million}}$, indicating that the debentures were sold at a premium.

Thus, the proceeds from the issuance of the debentures was \$6.477 million for Global Travels.

(2)

| EFFECT ON THE BALANCE SHEET EQUATION (Amounts are in millions of \$) | | | |
|---|------------------------|---|------------------------------|
| Scenario | Balance Sheet Equation | | |
| | Assets = | Liabilities + | Stockholders' Equity |
| Issuance of debentures | +6.477 (cash) | +6.000 (bonds payable) +\$0.477 (bond premium) | |
| First semi-annual payment | -0.300 (cash) | -0.041 (bond premium) | -0.259 (interest expense) |
| Payment at maturity | -6.000 (cash) | -6.000 (bonds payable) | |

(3)

| JOURNAL ENTRIES FOR THE BOND TRANSACTIONS (Amounts are in millions of \$) | | | |
|--|------------------|-------|--------|
| Date | Particulars | Debit | Credit |
| Issuance | Cash | 6.477 | |
| | To Bonds Payable | | 6.000 |
| | To Bonds Premium | | 0.477 |
| First Payment | Interest Expense | 0.259 | |
| | Bonds Premium | 0.041 | |
| | To Cash | | 0.300 |
| Maturity Payment | Bonds Payable | 6.000 | |
| | To Cash | | 6.000 |

(4) The bond related accounts can be easily updated, based on the data that is provided above.

(5)

To calculate, we note that after first payment, the net bond payable becomes $\$6.477 - \$0.041 = \$6.436$ million.

Thus, the interest expense for the second payment (i.e. tenure ending on Dec 31, 2010) will be given by $\$6.436 \times 4\% = \0.257 million.

Thus, the interest expense is \$0.257 million for the second payment.