

Solution:

Before we begin to understand the question, let us try to estimate the present value of the bond.

To calculate the present value of the bond, we need to break it down into two parts:

- **Payments Part:**

The first part focuses on the payments done to the bondholder.

Each period, the holder receives $\$10 \times 3\% = \0.3 million. This is for 10 payments. To find the present value of these payments at 5% interest per period, we need to evaluate this as an annuity.

Using the annuity tables [5% at 10 periods], we can see that the present value is $\$0.3 \times 7.7217 = \2.32 million.

- **Lumpsum Part:**

The second part focuses on the lumpsum that is to be paid at the maturity of the bond.

For this, we can check the present value to be $\$10 \times 0.6139 = \6.14 million.

Thus, adding the two parts, we see that the present value of the issued debentures becomes \$8.46 million, which is less than the \$10 million face value of the bonds.

Thus, the bonds are issued at a discount, and the discount is $\$10 - \$8.46 = \$1.54$ million.

Thus, we can use these values to create the schedule and provide how the bonds are going to be amortized over the entire periods of the payments.

The same is done from the next page onwards.

(1)

To create a schedule, let us write down all the values in the form of the table:

AMORTIZATION SCHEDULE OF THE DEBENTURES (Amount in \$)						
Period	Bond Payable (1)	Bond Discount (2)	Interest Expense (3)	Interest Payable (4)	Amortization (4) – (3)	Accumulated Amortization
1 st	10.00	1.54	0.42	0.30	0.12	0.12
2 nd	10.00	1.42	0.43	0.30	0.13	0.25
3 rd	10.00	1.29	0.44	0.30	0.14	0.39
4 th	10.00	1.15	0.44	0.30	0.14	0.53
5 th	10.00	1.01	0.45	0.30	0.15	0.68
6 th	10.00	0.86	0.46	0.30	0.16	0.84
7 th	10.00	0.70	0.46	0.30	0.17	1.01
8 th	10.00	0.53	0.47	0.30	0.17	1.18
9 th	10.00	0.36	0.47	0.30	0.18	1.36
10 th	10.00	0.18	0.48	0.30	0.18	1.54

The above table demonstrates the amortization schedule over the period.

(2)

JOURNAL ENTRY FOR THE MATURITY OF BOND (in millions of \$) (Interest only, as wanted in Question)		
Interest Expense	0.48	
To Cash		0.30
To Bond Discount		0.18