

Solution:

(1)

Since it is a zero-coupon bond, the interest rate is assumed to be 10% since this is what Amazon has specified in their criteria for the zero-coupon bond.

Thus, since the interest is assumed to be paid along with the lumpsum, we see that the proceeds is the present value of \$50 million at 10% for 10 years.

Using the present value table, we see that the proceeds is given by $\$50 \times 0.3855 = \19.275 million.

The journal entry is as follows:

JOURNAL ENTRY FOR ISSUANCE OF BONDS (Amounts are in millions of \$)		
Particulars	Debit	Credit
Cash	19.275	
Bond Discount	30.725	
To Bond Payable		50.000
(Being issuance of zero-coupon bond for development of Kindle.)		

(2)

(a) Assuming a straight-line amortization for the bond payable, we see that the discount amortizes linearly over time. So, each year the discount will be amortized by $\$30.725/10 = \3.073 million.

Thus, the journal entries for the interest expense will be given by:

JOURNAL ENTRY FOR AMORTIZATION (Amounts are in millions of \$)			
Payment	Particulars	Debit	Credit
1 st	Interest Expense To Bond Discount	3.073	3.073
2 nd	Interest Expense To Bond Discount	3.073	3.073

(b)

Using effective interest amortization, we see that for the first year, the interest expense will be $\$19.275 \times 10\% = \1.927 million.

Thus, for the second year, the interest expense will be $(\$19.275 + \$1.927) \times 10\% = \$2.120$ million.

Thus, the journal entries for the amortization are as follows:

JOURNAL ENTRY FOR AMORTIZATION (Amounts are in millions of \$)			
Payment	Particulars	Debit	Credit
1 st	Interest Expense To Bond Discount	1.927	1.927
2 nd	Interest Expense To Bond Discount	2.120	2.120

(3)

For the first year, if we consider difference in the interest expense only, then Amazon would need to pay $\$3.073 - \$1.927 = \$1.146$ million more in effective amortization.

Thus, the tax would be higher by $\$1.146 \times 40\% = \mathbf{\$0.458 \text{ million}}$ if used effective amortization instead of straight-line amortization.

(4)

Borrowers who desire to pay a lumpsum in the future and prevent spending periodically the lumpsum would be interested in taking these kinds of bonds. Though the yield is low, but it helps the borrower to not worry periodically about paying a certain amount to the bond holders.