CONCEPT: EFFECTIVE INTEREST AMORTIZATION OF BOND PREMIUM OR DISCOUNT

Stated Rate = Market Rate	The price of the bond will be _____ the face value
Stated Rate < Market Rate	The price of the bond will be _____ the face value
Stated Rate > Market Rate	The price of the bond will be _____ the face value

- The selling price of a bond is equal to the present value of the interest payments and principal payments:

On January 1, 2018, ABC Company issues $100,000 of 9% bonds payable maturing in five years. Interest is payable semi-annually on January 1 and July 1. The market interest rate was equal to 10%.

January 1, 2018 Journal Entry:

Bond Carrying Value = Bonds Payable Account – Discount on Bonds Payable (or + Premium on Bonds Payable)

$$Interest\ Expense = Bond\ Carrying\ Value * Market\ Interest\ Rate$$

$$Cash\ Interest\ Payment = Principal\ Amount\ of\ Bonds * Stated\ Interest\ Rate$$

$$Amortization\ of\ Discount\ or\ Premium = |Interest\ Expense - Cash\ Interest\ Payment|$$

Interest Expense JE for Discount Bond	Interest Expense JE for Premium Bond

On January 1, 2018, ABC Company issues $100,000 of 9% bonds payable maturing in five years. Interest is payable semi-annually on January 1 and July 1. The market interest rate was equal to 10%.

Semi-annual Interest Date	Beginning Bond Carrying Value	Interest Payment (Credit to Cash)	Interest Expense (Debit to Int. Exp)	Discount Amort. (Credit to Discount on BP)	Discount Account Balance	Ending Bond Carrying Value
1/1/2018						
7/1/2018						
1/1/2019						
7/1/2019						
1/1/2020						
7/1/2020						
1/1/2021						
7/1/2021						
1/1/2022						
7/1/2022						
1/1/2023						

- Interest is paid in cash. A journal entry is made for ***interest expense and discount amortization***:

On January 1, 2018, ABC Company issues $100,000 of 9% bonds payable maturing in five years. Interest is payable semi-annually on January 1 and July 1. The market interest rate was equal to 10%.

July 1, 2018 Journal Entry:

December 31, 2018 Journal Entry:

January 1, 2019 Journal Entry:

Present Value of $1									
Periods	4%	5%	6%	7%	8%	10%	12%	14%	16%
1	0.962	0.952	0.943	0.935	0.926	0.909	0.893	0.877	0.862
2	0.925	0.907	0.890	0.873	0.857	0.826	0.797	0.769	0.743
3	0.889	0.864	0.840	0.816	0.794	0.751	0.712	0.675	0.641
4	0.855	0.823	0.792	0.763	0.735	0.683	0.636	0.592	0.552
5	0.822	0.784	0.747	0.713	0.681	0.621	0.567	0.519	0.476
6	0.790	0.746	0.705	0.666	0.630	0.564	0.507	0.456	0.410
7	0.760	0.711	0.665	0.623	0.583	0.513	0.452	0.400	0.354
8	0.731	0.677	0.627	0.582	0.540	0.467	0.404	0.351	0.305
9	0.703	0.645	0.592	0.544	0.500	0.424	0.361	0.308	0.263
10	0.676	0.614	0.558	0.508	0.463	0.386	0.322	0.270	0.227
11	0.650	0.585	0.527	0.475	0.429	0.350	0.287	0.237	0.195
12	0.625	0.557	0.497	0.444	0.397	0.319	0.257	0.208	0.168
13	0.601	0.530	0.469	0.415	0.368	0.290	0.229	0.182	0.145
14	0.577	0.505	0.442	0.388	0.340	0.263	0.205	0.160	0.125
15	0.555	0.481	0.417	0.362	0.315	0.239	0.183	0.140	0.108
16	0.534	0.458	0.394	0.339	0.292	0.218	0.163	0.123	0.093
17	0.513	0.436	0.371	0.317	0.270	0.198	0.146	0.108	0.080
18	0.494	0.416	0.350	0.296	0.250	0.180	0.130	0.095	0.069
19	0.475	0.396	0.331	0.277	0.232	0.164	0.116	0.083	0.060
20	0.456	0.377	0.312	0.258	0.215	0.149	0.104	0.073	0.051

Present Value of Ordinary Annuity of $1									
Periods	4%	5%	6%	7%	8%	10%	12%	14%	16%
1	0.962	0.952	0.943	0.935	0.926	0.909	0.893	0.877	0.862
2	1.886	1.859	1.833	1.808	1.783	1.736	1.690	1.647	1.605
3	2.775	2.723	2.673	2.624	2.577	2.487	2.402	2.322	2.246
4	3.630	3.546	3.465	3.387	3.312	3.170	3.037	2.914	2.798
5	4.452	4.329	4.212	4.100	3.993	3.791	3.605	3.433	3.274
6	5.242	5.076	4.917	4.767	4.623	4.355	4.111	3.889	3.685
7	6.002	5.786	5.582	5.389	5.206	4.868	4.564	4.288	4.039
8	6.733	6.463	6.210	5.971	5.747	5.335	4.968	4.639	4.344
9	7.435	7.108	6.802	6.515	6.247	5.759	5.328	4.946	4.608
10	8.111	7.722	7.360	7.024	6.710	6.145	5.650	5.216	4.833
11	8.760	8.306	7.887	7.499	7.139	6.495	5.938	5.453	5.029
12	9.385	8.863	8.384	7.943	7.536	6.814	6.194	5.660	5.197
13	9.986	9.394	8.853	8.358	7.904	7.103	6.424	5.842	5.342
14	10.563	9.899	9.295	8.745	8.244	7.367	6.628	6.002	5.468
15	11.118	10.380	9.712	9.108	8.559	7.606	6.811	6.142	5.575
16	11.652	10.838	10.106	9.447	8.851	7.824	6.974	6.265	5.669
17	12.166	11.274	10.477	9.763	9.122	8.022	7.120	6.373	5.749
18	12.659	11.690	10.828	10.059	9.372	8.201	7.250	6.467	5.818
19	13.134	12.085	11.158	10.336	9.604	8.365	7.366	6.550	5.877
20	13.590	12.462	11.470	10.594	9.818	8.514	7.469	6.623	5.929