

Date of Exam: 8 /04/2019

Time: 3 Hours

Marks:

50

Note: 1. Attempt any 5 questions.

2. All questions carry equal marks (10 marks each)

3. Use of Calculators is allowed

4. PV Tables are provided with the question paper

1. Use the information given in the summarized balance sheet and statement of profit & loss to prepare a common base statement.

Statement of Profit and Loss		
Rs. in million		
	2018	2017
Total Revenues	950	790
Expenses excluding financing cost and tax	620	550
Profit before financing cost and tax	330	240
Financing cost	80	60
Profit before tax	250	180
Tax	75	54
Profit(loss) for the period	175	126
Balance Sheet		
Rs. in million		
	2018	2017
Shareholders' Funds	540	500
Long-term borrowings	230	200
Other non-current liabilities	150	140
Current liabilities	386	308
Total	1306	1148
Fixed assets	455	400
Other non-current assets	275	310
Current assets	576	438
Total	1306	1148

2. **Solve:**

- a. The dividend per share of XYZ was Rs. 4 in the current year and the company has been registering growth rate of 12 percent. The share is currently selling for Rs. 80. Calculate the company's cost of equity.
- b. Determine the cost of equity using CAPM approach where risk free rate of return equals 5 %, beta is 1.2 and the return on market portfolio is 14%.

3. Explain different aspects of working capital policy that a firm should take into consideration to ensure effective management of its working capital.

4. "Equity Capital represents ownership capital, as equity shareholders collectively own the company". Discuss the rights and risks of equity shareholders as owners of the company.

5. A 7-year, Rs. 1000 debenture of a firm can be sold for a net price of Rs. 976. The coupon rate of interest is 15 percent per year and it will be redeemed at 5 percent premium at maturity, that is, the maturity value will be Rs. 1050. The company tax rate is 35%. What would the after tax cost of debt be?

6. **Solve:**

- a. From the following information, calculate the operating leverage and comment on the result.

Particulars	Situation 1	Situation 2
No. of units sold	5000	5000
Selling price per unit	10	10
Variable cost	5	5
Fixed cost	6000	8000

- b. Relevant financial information for M Ltd. is given below:

Profit & Loss Account data (Rs. in Million)	Balance Sheet date	
	Beginning of 2018	End of 2018
Sales 1500	Inventory 200	220
	Accounts Receivable 160	150

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COGS 790	Accounts Payable 70	56
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7. Phoenix Company is considering two projects, P and Q. The expected cash flows of these projects are:

Project P

Year	0	1	2	3	4	5
Cash Flow	-4000	900	1000	1000	2000	4000

Project Q

Year	0	1	2	3	4	5
Cash Flow	-1600	700	700	600	800	800

Which project has better NPV, if the cost of capital is 10%?

Present value interest factor of \$1 per period at i% for n periods, PVIF(i,n).

n \ i	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%
0	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840
1	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706
2	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593
3	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499
4	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419
5	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352
6	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296
7	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249
8	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209
9	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176
10	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148
11	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124
12	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104
13	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088
14	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074
15	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062
16	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052
17	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044
18	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037
19	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031
20	0.660	0.538	0.438	0.358	0.293	0.240	0.200	0.164	0.136	0.112	0.093	0.078	0.065	0.054	0.045	0.037	0.031	0.026
21	0.647	0.522	0.420	0.339	0.274	0.221	0.182	0.147	0.120	0.097	0.079	0.065	0.053	0.043	0.035	0.028	0.023	0.018
22	0.635	0.506	0.403	0.321	0.256	0.203	0.165	0.130	0.104	0.082	0.065	0.052	0.041	0.032	0.025	0.019	0.014	0.010
23	0.623	0.491	0.387	0.304	0.239	0.186	0.149	0.114	0.089	0.068	0.052	0.040	0.029	0.021	0.015	0.010	0.007	0.005
24	0.611	0.478	0.373	0.289	0.224	0.171	0.135	0.100	0.076	0.056	0.041	0.030	0.021	0.014	0.009	0.006	0.004	0.003
25	0.600	0.465	0.359	0.274	0.209	0.156	0.120	0.085	0.062	0.043	0.029	0.019	0.011	0.007	0.005	0.003	0.002	0.001
26	0.589	0.452	0.345	0.259	0.194	0.141	0.105	0.070	0.048	0.030	0.017	0.009	0.006	0.004	0.003	0.002	0.001	0.001
27	0.578	0.440	0.332	0.246	0.181	0.128	0.092	0.057	0.036	0.019	0.010	0.007	0.005	0.003	0.002	0.001	0.001	0.000
28	0.567	0.430	0.321	0.235	0.170	0.117	0.081	0.046	0.026	0.011	0.006	0.004	0.003	0.002	0.001	0.000	0.000	0.000
29	0.556	0.418	0.308	0.222	0.157	0.104	0.068	0.033	0.014	0.007	0.004	0.003	0.002	0.001	0.000	0.000	0.000	0.000
30	0.545	0.406	0.295	0.209	0.144	0.091	0.055	0.020	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.534	0.394	0.283	0.197	0.132	0.079	0.043	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.523	0.382	0.271	0.185	0.120	0.067	0.031	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.512	0.370	0.259	0.173	0.108	0.054	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.501	0.358	0.247	0.161	0.096	0.041	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.490	0.346	0.235	0.149	0.084	0.028	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.479	0.334	0.223	0.137	0.072	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.468	0.322	0.211	0.125	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.457	0.310	0.200	0.113	0.048	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.446	0.298	0.188	0.101	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.435	0.286	0.176	0.089	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.424	0.274	0.164	0.077	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.413	0.262	0.152	0.065	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.402	0.250	0.140	0.053	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.391	0.238	0.128	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.380	0.226	0.116	0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
46	0.369	0.214	0.104	0.017	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
47	0.358	0.202	0.092	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48	0.347	0.190	0.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49	0.336	0.178	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.325	0.166	0.056	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Present value interest factor of an (ordinary) annuity of \$1 per period at i% for n periods, PVIFA

1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%
990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840
970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547
941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140
902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639
853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.057
795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.411
728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706
652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954
566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163
471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.338
368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.484
255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611
134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715
004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802
865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876
718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938
562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.996
398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033
226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.076
046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101
023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464	6.097	5.766	5.467	5.199
808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566	6.177	5.829	5.517	5.233
409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.644	8.855	8.176	7.586	7.070	6.617	6.215	5.858	5.539	5.251
835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.779	8.951	8.244	7.634	7.105	6.642	6.233	5.871	5.548	5.258
196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.915	9.042	8.304	7.675	7.133	6.661	6.246	5.880	5.554	5.262