



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2017/2018
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
BAC 815: FINANCIAL MANAGEMENT

DATE: Wednesday, 22nd November 2017

TIME: 2.00 p.m. - 5.00 p.m.

INSTRUCTIONS:

- Answer all the questions
- Show all your workings

QUESTION ONE - (Total marks = 15 marks)

- a) "The finance manager spends most of his time making managerial finance decisions as opposed to routine functions". Discuss. **(4 marks)**
- b) Korineb Ltd is considering whether to invest in a project which would entail immediate expenditure on capital equipment of Sh 40 million.

Expected sales from the project are as follows:

Probability	Sales Volume (units)
0.10	2,000,000
0.25	6,000,000
0.40	8,000,000
0.15	10,000,000
0.10	14,000,000

Once sales are established at certain volumes in the first year, they will continue at that same volume in subsequent years. The unit sales price will be Sh10, the unit variable cost Sh 6 and additions fixed costs (except depreciation) Sh 20 million.

The project would have a life of 6 years, after which the equipment would be sold at Sh 4 million. The company cost of capital is 10% and it is in the 40% tax bracket.

Required:

- (i) Compute the expected NPV. **(4 marks)**
- (ii) What is the minimum volume of sales per annum required to justify this project? **(2 marks)**
- (iii) Is the project acceptable? Why or why not? **(1 mark)**

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- c) A company negotiates a Sh 30 million loan for eight years from a financial institution. The interest rate is 14% per annum on the outstanding balance of the loan. The principal and interest will be repaid in eight equal year-end instalments.

Required

Prepare a loan repayment schedule and determine the amount of interest payable at the end of the 7th year

(4 marks)

QUESTION TWO (Total marks = 16 marks)

- a) The Managing Directors of three profitable listed companies discussed their companies dividend policies at a business lunch.

Company A has deliberately paid no dividends for the last five years.

Company B always pays a low dividend per share (after adjusting for the general price index) and offer regular bonus issues.

Company C always pays a dividend of 50% of earnings after taxation.

Each Managing Director is convinced that his company policy is maximising shareholders wealth.

Required:

Discuss the dividend policies used by the three companies.

(6 marks)

- b) Weka Industries has just paid the 2016 annual dividend of Sh. 3.50 per share. The firm's financial manager expects that these dividends will increase at 10% annual rate over the next 3 years. At the end of the 3 years, (end of 2019) the growth rate will decline to 5% for the foreseeable future. The firm's required rate of return is 15%. Estimate the intrinsic value of Weka share.

(4 marks)

- c) Kiongozi Ltd has just paid a dividend of kshs. 3, the growth rate which is constant of 9% has a share price of ksh. 30 today. The firm's beta is 1.2, risk free rate is 6% and the risk premium of 8%

Required:

Compute the average cost of capital of the Kiongozi Ltd

(4 Marks)

QUESTION THREE - (Total marks = 13 marks)

- a) On the 1st day of January 2017, you made a resolution to enter into active politics then and resolved to run for a political office on the 1st day of January 2022 of which time you will require a sum of kshs. 10,000,000 for your campaigns. Your local bank compounds interest at an 8% rate.

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Required:

- i) How much must you deposit on 1st day of January 2018 so as to have your targeted amount on the next election date. **(2 Marks)**
 - ii) As a keen finance manager you would wish to make equal payments on each 1st day of January 2018 through 2022 to accumulate your set target of kshs. 10,000,000, how large must each of the four payments be? **(3 marks)**
- b) Highlight the various measures that would minimize agency problems between the owners and the management. **(3 marks)**
- c) Mumias Milling Company purchased a grinder 3 years ago at a cost of Sh.3.5 million. The grinder had a life of 8 years at the time of purchase. It is being depreciated at 15% per year on a declining balance. The company is considering replacing it with a new grinder costing Sh.7 million with an expected useful life of 5 years.

Due to increased efficiency, the profit before depreciation is expected to increase by Sh.400,000 a year. The old and new grinders will now be depreciated at 25% per year on a declining balance for tax purposes.

The salvage value of the new grinder is estimated at Sh.210,000. The market value of the old grinder, today, is Sh.4 million. It is estimated to have a zero salvage value after 5 years.

The company's tax is 30% and the after tax cost of capital is 12%.

Required

Should the new grinder be bought? Explain.

(5 Marks)

QUESTION FOUR - (Total marks = 16 marks.)

- a) The management of Green Ltd intends to change the company's credit policy from 'net 30' to '3/10 net 45'. If this change is effected, annual sales will increase by 12% from the current level of sh.12 million while the proportion of bad debts will increase by from 1% to 1.4% of credit sales. A new credit assistant will also have to be employed at a salary of sh.260, 000 per annum. It is expected that 40% of the credit customers will benefit from cash discount.

The inventory level and the variable cost will however remain constant at 20% and

75% of the annual credit sales respectively. The rate of return on investment is 14% per annum. All sales are on credit. Assume 360 days financial year. Ignore the effects of taxation.

Required

Advise the management of Green ltd on whether or not to adopt the new credit policy

(4 marks)

b) Differentiate the following terminologies as applied in financial management when making investments decisions

- i) Hard capital Vs Soft capital
- ii) Sunk costs Vs Opportunity costs
- iii) Conventional cash flows Vs Non conventional cashflows
- iv) Independent Vs Mutually exclusive projects

(4 marks)

c) An investor has an investment fund of shs.1,000,000. He intends to apportion this fund to two securities, A and B, as follows; shs. 200,000 in security A and shs.800,000 in security B. The return on each security is dependent on the state of the economy as shown below:

State of economy	Probability	Return on security A	Return on security B
Boom	0.4	18%	24%
Average	0.5	14%	22%
Recession	0.1	12%	21%

Required

- i. Expected return on portfolio. (2 marks)
- ii. Standard deviation for each security. (4 marks)
- iii. Covariance between securities A and B in the portfolio and a comment (4 marks)

Present Value of an Annuity Table

	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	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	0.833
2	1.970	1.942	1.913	1.885	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	1.528
3	2.941	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	2.106
4	3.902	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	2.589
5	4.853	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	3.058	2.991
6	5.795	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	3.410	3.326
7	6.728	6.472	6.230	6.002	5.796	5.582	5.389	5.207	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	7.652	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	3.837
9	8.566	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	4.031
10	9.471	8.963	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.428	5.216	5.019	4.833	4.669	4.514	4.339	4.192
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.496	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	11.255	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	4.439
13	12.134	11.348	10.635	9.986	9.384	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	4.533
14	13.004	12.106	11.296	10.563	9.800	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	4.611
15	13.865	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	4.675
16	14.718	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	5.964	5.688	5.405	5.162	4.938	4.730
17	15.582	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	4.990	4.775
18	16.396	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	4.812
19	17.226	15.678	14.324	13.194	12.085	11.158	10.336	9.604	8.950	8.366	7.839	7.366	6.938	6.550	6.196	5.877	5.584	5.316	5.070	4.843
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.816	9.129	8.514	7.963	7.489	7.025	6.623	6.259	5.929	5.628	5.363	5.107	4.870
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.292	8.649	8.075	7.562	7.102	6.687	6.312	5.973	5.665	5.384	5.127	4.891
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.442	8.772	8.176	7.645	7.170	6.743	6.359	6.011	5.696	5.410	5.149	4.909
23	20.456	18.292	16.444	14.857	13.499	12.303	11.272	10.371	9.580	8.883	8.268	7.718	7.230	6.792	6.399	6.044	5.723	5.432	5.167	4.925
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.707	8.965	8.348	7.784	7.283	6.835	6.434	6.073	5.746	5.451	5.182	4.937
25	22.023	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	5.195	4.948
26	22.795	20.121	17.977	16.063	14.375	13.003	11.826	10.810	9.929	9.161	8.488	7.896	7.372	6.906	6.491	6.118	5.783	5.480	5.206	4.956
27	23.560	20.707	18.327	16.330	14.643	13.211	11.987	10.935	10.027	9.237	8.546	7.943	7.409	6.935	6.541	6.136	5.796	5.492	5.215	4.964
28	24.316	21.281	18.764	16.663	14.966	13.406	12.137	11.051	10.116	9.307	8.602	7.984	7.441	6.961	6.534	6.152	5.810	5.502	5.223	4.970
29	25.066	21.844	19.188	16.984	15.141	13.591	12.278	11.156	10.198	9.370	8.650	8.022	7.470	6.983	6.551	6.166	5.820	5.510	5.229	4.975
30	25.805	22.396	19.800	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	5.236	4.979
31	26.542	22.938	20.000	17.588	15.593	13.929	12.532	11.350	10.343	9.479	8.733	8.085	7.518	7.020	6.579	6.187	5.837	5.523	5.239	4.982
32	27.270	23.468	20.389	17.874	15.803	14.084	12.647	11.435	10.406	9.526	8.769	8.112	7.538	7.035	6.591	6.196	5.844	5.528	5.243	4.985
33	27.990	23.989	20.766	18.148	16.003	14.230	12.754	10.464	9.569	8.691	8.135	7.556	7.048	6.600	6.203	5.846	5.532	5.246	4.985	
34	28.703	24.499	21.132	18.411	16.193	14.368	12.854	11.587	10.518	9.609	8.829	8.157	7.572	7.060	6.609	6.210	5.854	5.536	5.249	4.990
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.587	9.644	8.855	8.176	7.588	7.070	6.617	6.215	5.858	5.539	5.251	4.992
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.677	8.879	8.192	7.598	7.079	6.623	6.220	5.862	5.541	5.253	4.993
37	30.800	25.969	22.167	19.143	16.711	14.737	13.117	11.775	10.653	9.706	8.900	8.208	7.609	7.087	6.629	6.224	5.865	5.543	5.255	4.994
38	31.485	26.441	22.482	19.368	16.868	14.846	13.193	11.829	10.691	9.733	8.919	8.221	7.618	7.094	6.634	6.228	5.867	5.545	5.256	4.995
39	32.163	26.903	22.808	19.584	17.017	14.949	13.265	11.879	10.726	9.757	8.936	8.233	7.627	7.100	6.638	6.231	5.869	5.547	5.257	4.996
40	32.835	27.355	23.115	19.793	17.169	15.046	13.332	11.925	10.757	9.779	8.961	8.244	7.634	7.106	6.642	6.233	5.871	5.548	5.258	4.997

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Present Value Table

	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.990	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	0.833
2	0.980	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	0.694
3	0.971	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	0.579
4	0.961	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	0.482
5	0.951	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	0.402
6	0.942	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	0.335
7	0.933	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	0.279
8	0.924	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	0.233
9	0.914	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	0.294	0.283	0.243	0.225	0.209	0.194
10	0.905	0.820	0.744	0.176	0.614	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.227	0.227	0.176	0.191	0.176	0.162
11	0.896	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	0.136
12	0.887	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	0.112
13	0.879	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	0.093
14	0.870	0.758	0.661	0.577	0.506	0.442	0.388	0.340	0.299	0.263	0.232	0.206	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.861	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	0.065
16	0.853	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	0.054
17	0.844	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	0.045
18	0.836	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	0.038
19	0.828	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	0.031
20	0.820	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	0.053	0.044	0.037	0.031	0.026	0.022
21	0.811	0.660	0.538	0.439	0.359	0.294	0.242	0.199	0.164	0.135	0.112	0.093	0.077	0.064	0.053	0.044	0.037	0.031	0.026	0.022
22	0.803	0.647	0.522	0.422	0.342	0.278	0.226	0.184	0.150	0.123	0.101	0.083	0.068	0.056	0.046	0.038	0.032	0.026	0.022	0.018
23	0.795	0.634	0.507	0.406	0.326	0.262	0.211	0.170	0.138	0.112	0.091	0.074	0.060	0.049	0.040	0.033	0.027	0.022	0.018	0.015
24	0.788	0.622	0.492	0.390	0.310	0.247	0.197	0.158	0.126	0.102	0.082	0.066	0.053	0.043	0.030	0.024	0.020	0.016	0.013	0.010
25	0.780	0.610	0.478	0.375	0.296	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030	0.024	0.020	0.016	0.013	0.010
26	0.772	0.598	0.464	0.361	0.281	0.220	0.172	0.135	0.106	0.084	0.066	0.053	0.042	0.033	0.026	0.021	0.017	0.014	0.011	0.009
27	0.764	0.586	0.450	0.347	0.268	0.207	0.161	0.125	0.098	0.076	0.060	0.047	0.037	0.029	0.023	0.018	0.014	0.011	0.009	0.007
28	0.757	0.574	0.437	0.333	0.255	0.196	0.150	0.116	0.090	0.069	0.054	0.042	0.033	0.026	0.020	0.016	0.012	0.010	0.008	0.006
29	0.749	0.583	0.424	0.321	0.243	0.185	0.141	0.107	0.082	0.063	0.048	0.037	0.029	0.022	0.017	0.014	0.011	0.008	0.006	0.005
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.005	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004
31	0.735	0.541	0.400	0.296	0.220	0.164	0.123	0.092	0.069	0.052	0.039	0.030	0.023	0.017	0.013	0.010	0.008	0.006	0.005	0.004
32	0.727	0.531	0.388	0.285	0.210	0.155	0.115	0.085	0.063	0.047	0.035	0.027	0.020	0.015	0.011	0.009	0.007	0.005	0.004	0.003
33	0.720	0.520	0.377	0.274	0.200	0.146	0.107	0.079	0.058	0.043	0.032	0.024	0.018	0.013	0.010	0.007	0.006	0.004	0.003	0.002
34	0.713	0.510	0.366	0.264	0.190	0.138	0.100	0.073	0.053	0.039	0.029	0.021	0.016	0.012	0.009	0.006	0.005	0.004	0.003	0.002
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008	0.006	0.004	0.003	0.002	0.002
36	0.699	0.490	0.345	0.244	0.173	0.123	0.088	0.063	0.045	0.032	0.023	0.017	0.012	0.009	0.007	0.005	0.004	0.003	0.002	0.001
37	0.692	0.481	0.335	0.234	0.164	0.116	0.082	0.058	0.041	0.029	0.021	0.015	0.011	0.008	0.006	0.004	0.003	0.002	0.001	0.001
38	0.685	0.471	0.325	0.225	0.157	0.109	0.076	0.054	0.038	0.027	0.019	0.013	0.010	0.007	0.005	0.004	0.003	0.002	0.001	0.001
39	0.678	0.462	0.316	0.217	0.149	0.103	0.071	0.050	0.035	0.024	0.017	0.012	0.009	0.006	0.004	0.003	0.002	0.001	0.001	0.001
40	0.672	0.453	0.307	0.206	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.010	0.006	0.005	0.004	0.003	0.002	0.001	0.001	0.001

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION