TECHNICAL UNIVERSITY OF MOMBASA

School of Business & Social Studies

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN
BACHELOR OF COMMERCE

BFI 4203: BUSINESS FINANCE

MAIN EXAMINATIONS
SERIES: August 2019 Paper2
TIME: 2 HOURS

INSTRUCTIONS:
Answer Question **ONE (Compulsory)** and any other **TWO** questions
This paper consists of Five printed pages

QUESTION 1 (Compulsory)

Debt is a useful financial tool

Picture a small startup company emerging within the city of Nairobi. The directors of the said company are your typical young Kenyan guys; ambitious to the core, relentless and determined to make an honest living by meeting the needs of their prospective clients. The young guys are eagerly purposeful; ideas are overflowing in their minds. They have seen a gap in the market in their field of expertise, and they have a clear roadmap of how they can fill that gap. Ideas without capital, What's more, they aspire to be the best in their field, and for that aspiration to come true, they first need to develop a working business model for their company. Consequently, they set up a meeting to discuss the way forward. On brainstorming further, they realize that they need to finance their grand ideas. They need capital. How do they acquire the required capital to take their company to the next level? They sit down over a cup of coffee one morning, take out a pen and notebook and suggest various ways through which they can source for funds to finance their company operations. They figure that they can round up their savings, but those are not enough to even pay for office space regularly. They therefore decide that they will talk to their friends, parents and relatives to invest in their company by buying shares from which they will be earning dividends. Their supportive parents agree, and so do some of their friends. However, some of their friends are skeptical of the business idea, they toy with the possibility of the company going under within a few months and they do not want to lose money in the process. Subsequently, they decline the offer.

(Extract: Article by Ben Makomba, Daily Standard Newspaper, 5th October 2018)

Required:

a) Explain any Five sources of Debt that young people may pursue in order to finance their business ideas (10 marks)
b) Explain the Four Main functions of Finance in an organization and how each function may impact on the business ideas by these young people (12 Marks)
c) Explain to the young people on the relationship between business Risk and Expected return in relation to their new business ideas (8 Marks)

QUESTION 2
a) Discuss any FIVE characteristics of money markets in Kenya. (10 marks)
b) Discuss any FIVE services rendered by capital markets in Kenya. (10 marks)

QUESTION 3
a) The capital structure of Chenje Limited is given below:

	Sh. "million"
6,000,000fully paid ordinary shares	60
Retained earnings	40
2,000,000 8% preference shares	30
400,000 10% long term debentures	70
	200

The company intends to raise additional finance as follows:
Sh. 50,000,000 from issuing 8% debentures
Sh. 40,000,000 from selling new ordinary shares at a flotation cost of Sh. 2 per share
The current market value of each ordinary share is Sh. 40. The shareholders expect a dividend of Sh. 5 share next year. The dividends grow at the rate of 12% per annum into perpetuity. The debentures of the company have a face value of Sh. 100 each with market value of Sh. 150. The company's tax rte is 30%.
Required:
i. The company's weighted average cost of capital (WACC) (6 marks)
ii. The marginal cost of capital (6 marks)

b) Mudziagrzi Linited is currently issuing 9% bonds redeemable at Sh. 100 par value in five years' time. Alternatively, each bond may be converted on that date into 20 ordinary shares of the company. The current market price per share is Sh. 4.45 and this is expected to grow at the rate of 6.5% per annum for the foreseeable future. The company's cost of debt is 7% per annum.
Required:
i. Market value of the bond (4 marks)
ii. Floor Value of the bond (4 Marks)

QUESTION 4
The following financial statements were obtained from the books of Mwarabu Ltd
Income statement for the year of income ending 31st December 2016

	Sh.
Sales	6,000,000
Cost of sales	2,400,000
Gross Profit	3,600,000
Less operating expenses	1,500,000
	2,100,000
Less corporation tax	350,000
	1,750,000

Dividends David	350,000
Retained Earnings	1,400,000

Statement of Financial Position As at 31st December 2016

	Sh.
40,000 ordinary shares of @ 200	8,000,000
Retained earnings	2,100,000
10% debentures	2,850,000
Payables	1,050,000
Bank overdraft	400,000
	14,400,000
Fixed assets	9,000,000
Inventory	1,900,000
Receivables	2,500,000
Cash	1,000,000
	14,400,000

Required:

Compute the following ratios:

i). Debt equity ratio
ii). Fixed assets turnover ratio
iii). Current ratio
iv). Acid test ratio
v). Earnings per share
vi). Dividend per share
vii). Return on capital employed
viii). Mark-up
ix). Margin
x). Working capital ratio. (20 marks)

QUESTION 5

Moran Company ltd purchased a packing machine 3 years ago at a cost of Sh.4.5 million. The machine had a life of 8 years at the time of purchase. The company is considering replacing it with a new packing machine costing Sh.6 million with an expected useful life of 5 years. Due to increased efficiency, the sales are expected to increase by Sh.850,000 a year, the labor costs would decrease by Sh.420,000 per year while the maintenance costs would increase at the following rate:

Year	Maintenance Costs
1	50,000
2	110,000
3	135,000
4	145,000
5	168,000

The salvage value of the new packing machine is estimated at Sh.690,000. The market value of the old machine, today, is Sh.3.5 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

a) Explain any three non financial methods used for appraising the projects (6 marks)
b) Moran Company ltd prefers NPV approach in appraising their projects. Advise Moran ltd on whether the new grinder should be bought. (14 marks)

Present value interest factor of $1 per period at i% for n periods, PVIF(i,n).																				
Period	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	0.923	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	0.284	0.263	0.243	0.225	0.209	0.194
10	0.905	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	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	0.135
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	0.505	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	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	0.061	0.051	0.043	0.037	0.031	0.026
25	0.780	0.610	0.478	0.375	0.295	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
30	0.742	0.552	0.412	0.308	0.231	0.174	0.131	0.099	0.075	0.057	0.044	0.033	0.026	0.020	0.015	0.012	0.009	0.007	0.005	0.004
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
40	0.672	0.453	0.307	0.208	0.142	0.097	0.067	0.046	0.032	0.022	0.015	0.011	0.008	0.005	0.004	0.003	0.002	0.001	0.001	0.001
50	0.608	0.372	0.228	0.141	0.087	0.054	0.034	0.021	0.013	0.009	0.005	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000

Future value interest factor of $1 per period at i% for n periods, FVIF(i,n).

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100	1.110	1.120	1.130	1.140	1.150	1.160	1.170	1.180	1.190	1.200
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210	1.232	1.254	1.277	1.300	1.323	1.346	1.369	1.392	1.416	1.440
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331	1.368	1.405	1.443	1.482	1.521	1.561	1.602	1.643	1.685	1.728
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464	1.518	1.574	1.630	1.689	1.749	1.811	1.874	1.939	2.005	2.074
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611	1.685	1.762	1.842	1.925	2.011	2.100	2.192	2.288	2.386	2.488
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772	1.870	1.974	2.082	2.195	2.313	2.436	2.565	2.700	2.840	2.986
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949	2.076	2.211	2.353	2.502	2.660	2.826	3.001	3.185	3.379	3.583
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144	2.305	2.476	2.658	2.853	3.059	3.278	3.511	3.759	4.021	4.300
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358	2.558	2.773	3.004	3.252	3.518	3.803	4.108	4.435	4.785	5.160
10	1.105	1.219	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594	2.839	3.106	3.395	3.707	4.046	4.411	4.807	5.234	5.695	6.192
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853	3.152	3.479	3.836	4.226	4.652	5.117	5.624	6.176	6.777	7.430
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138	3.498	3.896	4.335	4.818	5.350	5.936	6.580	7.288	8.064	8.916
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452	3.883	4.363	4.898	5.492	6.153	6.886	7.699	8.599	9.596	10.699
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797	4.310	4.887	5.535	6.261	7.076	7.988	9.007	10.147	11.420	12.839
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177	4.785	5.474	6.254	7.138	8.137	9.266	10.539	11.974	13.590	15.407
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595	5.311	6.130	7.067	8.137	9.358	10.748	12.330	14.129	16.172	18.488
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054	5.895	6.866	7.986	9.276	10.761	12.468	14.426	16.672	19.244	22.186
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560	6.544	7.690	9.024	10.575	12.375	14.463	16.879	19.673	22.901	26.623
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116	7.263	8.613	10.197	12.056	14.232	16.777	19.748	23.214	27.252	31.948
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727	8.062	9.646	11.523	13.743	16.367	19.461	23.106	27.393	32.429	38.338
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835	13.585	17.000	21.231	26.462	32.919	40.874	50.658	62.669	77.388	95.396
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449	22.892	29.960	39.116	50.950	66.212	85.850	111.065	143.371	184.675	237.376
35	1.417	2.000	2.814	3.946	5.516	7.686	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.176	180.314	243.503	327.997	440.701	590.668
40	1.489	2.208	3.262	4.801	7.040	10.286	14.974	21.725	31.409	45.259	65.001	93.051	132.78	188.88	267.864	378.721	533.869	750.378	1,051.67	1,469.77
50	1.645	2.692	4.384	7.107	11.467	18.420	29.457	46.902	74.358	117.39	184.56	289.00	450.74	700.23	1,083.66	1,670.70	2,566.22	3,927.36	5,988.91	9,100.44