THE OPEN UNIVERSITY OF SRI LANKA
MASTER OF BUSINESS ADMINISTRATION
FINAL EXAMINATION
MCP 2610 - CORPORATE FINANCE
DURATION - 03 HOURS

Date : 15.12.2018	Time : 1.30pm to 4.30pm

Instructions: Answer ALL four (04) questions. Numbering of the answers in your answer script should follow the numbers assigned to the questions in the paper. Illegible hand writing is liable to loose marks.
Use of non-programmable calculators are allowed.

Question No. 01

(a) Explain briefly the term "Finance". **(03 Marks)**

(b) State four (04) major decisions involved in finance as a business function and explain them briefly. **(08 Marks)**

(c) Explain the importance of financial markets for the finance decisions, given in part (b) above. **(04 Marks)**

(d) Discuss three (03) issues involved when using "profit maximization" as the objective of a business, and how the objective of "maximization of shareholders' wealth" deals with these issues. **(10 Marks)**

(Total: 25 Marks)

Question No. 02

(a) Explain briefly the terms 'Risk' and 'Return', and their applications in investment decisions. **(04 Marks)**

(b) Explain the relationship between diversification and risk and discuss how efficient diversification can be achieved. **(06 Marks)**

(c) You are currently considering for investing Rs. 15 million in equity investment portfolio. Your analysis reveals that equity stocks of the following three companies are suitable candidates for your investment.

Company	Expected Return (%)	Standard Deviation (%)
Alpha PLC	15	20
Gama PLC	12	15
Beta PLC	16	23

	Correlation Matrix		
	Alpha PLC	Gama PLC	Beta PLC
Alpha PLC	1.0	-0.8	0.7
Gama PLC		1.0	0.4
Beta PLC			1.0

Based on the above information, you are required to;

(i) Calculate the expected return of the portfolio if Rs 15 million is equally invested in stocks of all three companies. **(02 Marks)**

(ii) Assume you prefer for a portfolio consisting of two stocks, each with an equal amount of investment. Calculate expected returns and standard deviations of all possible two-stock portfolios. **(09 Marks)**

(iii) Compare the standard deviations of the portfolios, calculated in part (ii) above, and explain reasons for their differences. **(04 Marks)**

(Total: 25 Marks)

Question No. 03

(a) State four (04) differences between equity shares and debentures. **(04 Marks)**

(b) Discuss three (03) methods used for valuation of equity shares. **(06 Marks)**

(c) Debentures issued by Blueberry PLC pay interest annually at the rate of 15% per year. A debenture's par value is Rs 1,000/- and has five years to maturity. The yield to maturity is 13%. What is the value of a debenture? **(05 Marks)**

(d) Blueberry PLC expects to have earnings of Rs 5/- per share for the coming financial year. The company plans to retain all its earnings for the next two years. It will then retain 60% of its earnings from that point onwards. Each year, the retained earnings will be invested in a

new project which will generate an earnings growth of 15% per year. Any earnings that are not retained will be paid out as dividends. Assume the number of shares issued by the company remains constant and all earnings growth comes from the investment of retained earnings. If the company's cost of equity capital 12% per annum, what price would you estimate for its equity share?

(Hint: Use dividend based valuation)

(10 Marks)

(Total: 25 Marks)

Question No. 04

The following are the financial statements of Teta PLC for the years ending 31st March 2017 and 2018.

Statement of Comprehensive Income for the year ended 31st March,

(Amounts are in rupees millions)	2018	2017
Sales	20,092	19,889
Cost of sales	(6,044)	(6,204)
Gross Profit	14,048	13,685
Selling and Administrative Expenses	(7,277)	(9,221)
Depreciation and Amortization	(803)	(773)
Interest expense	(308)	(292)
Income before tax	5,660	3,399
Income tax	(1,691)	(1,222)
Net Income	3,969	2,177
Other comprehensive items	0	0
Total Comprehensive Income for the year	3,969	2,177

Statement of Financial Position as at 31st March;

(Amounts are in rupees millions)	2018	2017
Assets		
Non-current Assets		
Property, plant and equipment	7,105	6,614
Less; Accumulated Depreciation	(2,652)	(2,446)
Net Property, plant and equipment	4,453	4,168
Intangible Assets	10,793	10,046
Current Assets		
Inventory	2,055	1,066

Trade Receivables	3,882	1,757
Other current assets	300	1,905
Cash	934	1,892
Total Assets	22,417	20,834
Equity		
Common Stocks	4,016	3,444
Retained profit	6,350	5,872
Non-current Liabilities		
Finance leases	1,403	1,362
Long-term bank loans	6,118	5,651
Current Liabilities		
Trade Payables	3,679	3,905
Income tax payable	851	600
Total Equity and Liabilities	22,417	20,834

Using these financial statements, you are required to;

(a) Calculate working capital as at 31st March, 2017 and 31st March, 2018.   **(04 Marks)**

(b) Discuss the liquidity position of the company using relevant financial ratios by identifying areas for which special attention of the company's management is required. **(08 Marks)**

(c) Analyze and discuss the profitability and the efficiency of assets utilization of the company for the financial year ending 31st March, 2018 using appropriate financial ratios.

(10 Marks)

(d) Discuss two (02) limitations when using financial ratios as an analytical tool. **(03 Marks)**

(Total: 25 Marks)

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PRESENT VALUE TABLE

Present value of $1, that is $(1+r)^{-n}$ where r = interest rate; n = number of periods until payment or receipt.

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164
20	0.820	0.673	0.554	0.456	0.377	0.312	0.258	0.215	0.178	0.149

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.079	0.065
16	0.188	0.163	0.141	0.123	0.107	0.093	0.081	0.071	0.062	0.054
17	0.170	0.146	0.125	0.108	0.093	0.080	0.069	0.060	0.052	0.045
18	0.153	0.130	0.111	0.095	0.081	0.069	0.059	0.051	0.044	0.038
19	0.138	0.116	0.098	0.083	0.070	0.060	0.051	0.043	0.037	0.031
20	0.124	0.104	0.087	0.073	0.061	0.051	0.043	0.037	0.031	0.026

Cumulative present value of $1 per annum, Receivable or Payable at the end of each year for n years $\frac{1-(1+r)^{-n}}{r}$

Periods (n)	Interest rates (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.134	11.348	10.635	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.004	12.106	11.296	10.563	9.899	9.295	8.745	8.244	7.786	7.367
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824
17	15.562	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201
19	17.226	15.679	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.878	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Periods (n)	Interest rates (r)									
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	7.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
16	7.379	6.974	6.604	6.265	5.954	5.668	5.405	5.162	4.938	4.730
17	7.549	7.120	6.729	6.373	6.047	5.749	5.475	5.222	4.990	4.775
18	7.702	7.250	6.840	6.467	6.128	5.818	5.534	5.273	5.033	4.812
19	7.839	7.366	6.938	6.550	6.198	5.877	5.584	5.316	5.070	4.843
20	7.963	7.469	7.025	6.623	6.259	5.929	5.628	5.353	5.101	4.870