



TECHNICAL UNIVERSITY OF MOMBASA

School of Business

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN BCOM, BBA, BBIT, BBOM

BFI 4203: BUSINESS FINANCE

SPECIAL/ SUPPLEMENTARY EXAMINATIONS

SERIES: November 2024

TIME: 2 HOURS

INSTRUCTIONS:

Answer Question **ONE (Compulsory)** and any other **TWO** questions

This paper consists of Four printed pages

Do **Not** write on this **Question Paper**

QUESTION 1 (Compulsory)

Modern finance function led by the CFO is again being disrupted by a burgeoning nexus of forces. But this time it's all about digital innovation, the proliferation of Big Data, volatile risk environment and regulations, and increasingly demanding stakeholders. Proactive leadership is a must-have nowadays. And with it, businesses need to guide the organization's strategy through a partnership with the CEO and C-suite executives. They must work together and drive innovation to achieve sustainable, profitable growth.

Required:

- Explain any Five sources of Finance and explain how digital transformation has impacted on each (10 marks)
- Digital transformation may face numerous risks. Explain any relationship that may exist between Risks and expected return (10 Marks)
- Explain any Five functions of Finance and explain how digital transformation may impact on each (10 Marks)

QUESTION 2

Briefly describe the following terms as applied in financial markets in Kenya.

- Central Depository Systems (5 marks)
- Over the counter markets and Exchange market (5 Marks)
- Primary and Secondary Markets (5 Marks)
- Capital and money markets (5 marks)

QUESTION 3

- The following financial statements were obtained from the books of Fafiri Ltd

Income statement for the year of
income ending 31st December 2018

	Sh.
Sales	5,000,000
Cost of sales	2,400,000
Gross Profit	2,600,000
Less operating expenses	1,000,000
	1,600,000
Less corporation tax	400,000
	1,200,000
Dividends Paid	350,000
Retained Earnings	850,000

Statement of Financial Position As at 31st
December 2018

	Sh.
30,000 ordinary shares of @ 200	6,000,000
Retained earnings	850,000
10% debentures	1,800,000
Payables	950,000
Bank overdraft	400,000
	10,000,000
Fixed assets	5,000,000
Inventory	1,500,000
Receivables	2,500,000
Cash	1,000,000
	10,000,000

Required:

Compute the following ratios:

- i). Fixed assets turnover ratio (2 Marks)
- ii). Acid test ratio (2 Marks)
- iii). Earnings per share (1 Marks)
- iv). Dividend per share (1 Marks)
- v). Return on capital employed (2 Marks)
- vi). Operating Profit Margin (2 Marks)
- vii). Average Receivables collection period (2 marks)

Total (12 Marks)

- b) Mbogi Buzz Ltd 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. Value of the Ordinary shares (4 Marks)

QUESTION 4

- a) The capital structure of Chineke Limited is given below:

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

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 rate is 30%.

Required:

- i. The company's weighted average cost of capital (WACC) (8 marks)
 - ii. The marginal cost of capital (4 marks)
- b) Describe Dividend Discounting Model (DDM) as used in cost of equity calculations and valuation of securities and state its main assumptions. (8 Marks)

QUESTION 5

- a) Bwana Eli purchased is considering whether to buy a Motorcycle or a Carwash Machine. The after tax cost of capital is expected to be 12%. The respective cash flows under each investment option are as follows:

Year	Motorcycle (Ksh)	Carwash Machine (Ksh)
1	27,995.52	16,797.31
2	37,641.15	25,094.10
3	49,157.30	25,280.90
4	62,893.08	18,867.92
5	58,201.06	29,982.36
6	44,754.44	38,392.50
Scrap Value	8,500.00	5,000.00
Purchase Cost	84,000.00	32,000.00

Advise Bwana Eli on which investment to make. He prefers making his decisions based on the Payback period and Net Present Value Approach. (12 marks)

- b) The following cash flows were projected by Hard Cheza Limited:

Year	Cash-flows (Ksh)
1	700,000
2	1,700,000
3	940,000
4	1,250,000
5	1,400,000
6	1,205,000

Discounting/compounding rate 14%

Required:

- i). Compute the present value (4 Marks)
- ii). Future Value of cash-flows at year six. (4 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

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