



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BUSINESS & ECONOMICS
UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION
FIRST YEAR SECOND SEMESTER 2022/2023 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: MBA 811

COURSE TITLE: FINANCIAL MANAGEMENT

EXAM VENUE:

STREAM: (MBA)

DATE: 23/12/2022

EXAM SESSION: 9.00-12.00NOON

TIME: 3 HOURS

INSTRUCTIONS:

- 1. Answer ANY FOUR questions**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE (15 MARKS)

(a) (i) At a capital cost of 10% p.a., determine which of the following three options to receive in Payment for a house:

Option one: US \$ 500,000 after three years

Option two: Annual rent of US \$ 60,000 at the end of each of the 15 years starting now

Option three: US \$ 400,000 now

(5 marks)

(ii) Determine how much money you will deposit to earn Ksh. 400,000 p.a. without ever cutting into your original deposit, opportunity cost being 8% p.a.

(3 marks)

(b) A firm X provides you with the following information

	<u>Kshs</u>
Sales revenue	640,000
Variable cost	480,000
Fixed costs	80,000
Variables cost per unit	6
Selling price per unit	8
Initial sales in units	80,000
New sales	96,000

Required:

(i) Explain the concept of leverage as used in finance **(1 marks)**

(ii) Determine firm's Degree of Operating Leverage (DOL) **(3 marks)**

(iii) Degree of Financial Leverage (DFL) **(3 marks)**

QUESTION TWO (15 MARKS)

a) A company has provided sales and purchases for 3 months of the year 2022 as follows:

	Sales (US \$)	Purchases (US \$)
April	1,000,000	500,000
May	800,000	400,000
June.	1,200,000	600,000

80% of the sales are collected in the month of sale and 20% the following month. 20% of the purchases are paid for in the month of purchase and 80% are paid in the first month after purchase. The desired cash balance each month is Kshs200, 000.

Required:

Prepare a cash budget for the three months for this company

(6 marks)

b) ABC ltd has estimated that fixed costs per month are Ksh 48,000 and variable cost per Kshs of sales is 1.20

Required:

- (i) What is the break-even point per month in sales? **(2 marks)**
- (ii) What levels of sales are needed for a monthly profit of Kshs120, 000? **(2 marks)**
- (iii) For the month of July ABC ltd anticipates sales of Kshs2, 400, 000. What is the expected level of profit? **(2 marks)**
- (iv) Explain the limitations of Break-Even Analysis as a tool for financial planning **(3 marks)**

QUESTION THREE (15 MARKS)

- (a) You have been appointed as the Chief Finance Manager of Kisumu County government. Explain four functions that you are expected to repetitively carry out in this capacity. **(3 marks)**
- (b) A Project costs Ksh.10, 000 today and is expected to pay back Ksh.7, 000 in the first year and Ksh. 6,500 in the second year and nothing thereafter. Determine the project's IRR. **(4 marks)**
- (c) Jeremy limited wishes to expand its output by purchasing a new machine worth 170,000 and installation costs are estimated at 40,000/=. In the 4th year, this machine will call for an overhaul to cost 80,000/=. Its expected cash inflows are:

Year	1	2	3	4	5	6
Cash inflow(US \$)	60,000	72,650	35,720	48,510	91,630	83,715

This company can raise finance to purchase machine at 12% interest rate.

Compute NPV and advise management accordingly. **(6 marks)**

- (d) State the reasons for preferring net present value (NPV) to the internal rate of return (IRR) as a criterion for evaluating investment projects **(2 marks)**

QUESTION FOUR (15 MARKS)

a) Debenture finance is a form of long term debt raised after a company sells debenture certificates to the holder and raises finance in return. This source of long term financing however is not popular in the Kenyan context.

Required: Highlight four reasons behind Unpopularity of Debentures of Kenya's Financial Market. **(4 marks)**

(b) "Agency problems can be solved by proper corporate governance".

(i) What is an agency problem? **(2 marks)**

(ii) Explain three types of agency problems and for each give one method of resolving it.

(9 marks)

QUESTION FIVE (15 MARKS)

(a) State and explain any three factors that influence the cost of finance/capital **(3 marks)**

(b)The following information relates to the capital structure of the Mavuno Co. Ltd:

(1) The current capital structure of the company which is considered optimal comprises: Ordinary share capital – 50%, preference share capital – 10% and debt – 40%.

(2) The firm can raise an unlimited amount of debt by selling Sh.1, 000 par value, 10 year 10% debentures on which annual interest payments will be made. To sell the issue it will have to grant an average discount of 3% on the par value and meet flotation costs of Sh.20 per debenture.

(3) The firm can sell 11% preference shares at the par value of Sh.100. However, the issue and selling costs are expected to amount to Sh.4 per share. An unlimited amount of preference share capital can be raised under these terms.

(4)The firm's ordinary shares are currently selling at Sh.80 per share. The company expects to pay an ordinary dividend of Sh.6 per share in the coming year. Ordinary dividends have been growing at an annual rate of 6% and this growth rate is expected to be maintained into the foreseeable future. The firm can sell unlimited amounts of new ordinary shares but this will require an under -pricing of Sh.4 per share in addition to flotation costs of Sh.3 per share.

(5) The firm expects to have Sh.225, 000 of retained earnings available in the coming year. If the retained earnings are exhausted, new ordinary shares will have to be issued as the form of equity financing.

(6)The company is in the 30% corporation tax bracket.

Required

- (i) Determine the cost of each component of Capital **(9 marks)**
(ii) Hence work out the Weighted Average Cost of Capital (WACC) for the Company **(3 marks)**

QUESTION SIX (15 MARKS)

- (a) Examine the relevance of management of working capital **(5 marks)**
(b) The balance sheet of Kipepeo Company as at 31st Dec 2021 is given below:

Assets	(US \$)	Liabilities	(US \$)
Cash	5,000	Accounts payable	40,000
Debtors	40,000	Accrued expenses	10,000
Inventory	25,000	Notes payable	15,000
Fixed Assets	<u>50,000</u>	Share capital	10,000
		Retained earnings	<u>45,000</u>
Total	120,000		120,000

Current sales are Ksh.2,00,000. All assets, accrued expenses and accounts payable are expected to maintain current relationship to sales as sales volume increases. The sales are projected to grow by 60% in the year 2022. The company pays out 40% of its net profit and earns 6% after tax on sales.

Required:

- (i) Prepare a proforma balance sheet as at 31st Dec 2022 **(7 marks)**
(ii) Determine the percentage of external funds required (PEFR) for Kipepeo Co. **(3 marks)**

Present Value Table (PVIF)

Present value of 1 i.e. $PVIF = (1 + r)^{-n}$

Where r = discount rate

n = number of periods until payment

		<i>Discount rate (r)</i>									
period (n)	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	0.705	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	
(n)	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	0.074	0.065	

Present Value of Annuity Table

Present value of an annuity of 1 i.e. PVIFA = $\frac{1-(1+r)^{-n}}{r}$

Where r = discount rate
n = number of periods

Discount Rate (r %)										
Period (n)	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
(n)	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	4.793	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