



TECHNICAL UNIVERSITY OF MOMBASA

School of Business

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN
BACHELOR OF COMMERCE
BACHELOR OF BUSINESS ADMINISTRATION

BFI 4203: BUSINESS FINANCE

MAIN EXAMINATIONS

SERIES: AUGUST 2024

TIME: 2 HOURS

INSTRUCTIONS:

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

Don't Write on this Question Paper

This paper consists of Four printed pages

QUESTION 1 (Compulsory)

GenZ Engineering Limited intends to establish a factory in Kwale at a cost of Ksh 888,000,000. The company is being presented with finances from three financial institutions, with the repayment scheme as follows:

- Bank 1: An annual repayment of Ksh 127,244,155.81 for 15 years
- Bank 2: An annual repayment of Ksh 140,779,988.91 for 12 years
- Bank 3: An annual repayment of Ksh 155,538,952.66 for 10 years

The current prevailing interest rate is 11%

Required:

- a) Explain any Five sources of finance to fund the available projects for GenZ Engineering Limited (10 marks)
- b) Calculate the total interest payable under each Bank above and advise GenZ Engineering Limited on the best option to take (12 Marks)
- c) Explain the Four Main functions of Finance (8 Marks)

QUESTION 2

Bwana Mali purchased is considering whether to buy a Motorcycle at a cost of 550,000. The asset will be financed through a loan whose after-tax cost of capital is expected to be 12%. The motorcycle is expected to have an economic life of 5 years.

Required:

- a) The motorcycle is expected to earn a cash inflow of Ksh 200,000 at the end of first year. The annual cashflows are expected to decline at a constant rate of 10%, and the expected scrap value at the end of economic life is Ksh 27,321.60. Calculate

the Net Present Value and Profitability index and Advise Bwana Mali whether to buy the motorcycle or not. (12 Marks)

- b) The loan taken by Bwana Mali is to be repaid through equal annual installments for 5 years. Calculate the installment amount and prepare the loan repayment schedule (8 Marks)

QUESTION 3

- a) Describe Dividend Discounting Model (DDM) as used in cost of equity calculations and valuation of securities and state its main assumptions. (6 Marks)
- b) Discuss any the distinction between Over the counter (OTC) and exchange markets. (6 marks)
- c) Discuss any Four functions of Central Depository System as applied in capital markets in Kenya. (8 marks)

QUESTION 4

- a) XYZ Ltd is a company quoted at the NSE. The capital section of its current balance sheet provides the following information about its capital structure.

	Ksh
2,000, 10% Debenture	200,000
12% Khs 20 preference share capital	100,000
Ordinary share capital @ shs 10	200,000
	500,000

- A survey of the market has shown that whereas the ordinary shares of the company are trading at Ksh 40 the preferential shares are trading at only Ksh. 1.50 above the par value.
- The prices are not expected to change very much in the planning period. The market price of debentures id Ksh 125. The finance department has determined that if the current investment policy is followed strictly, then earnings and dividends will grow at 4% at least for the foreseeable future.
- Finally, the firm's capacity falls within the marginal tax bracket of 30% which is not expected to change. The current ordinary dividend is Shs 1.85.

Required:

Compute the Weighted Average Cost of Capital (12 Marks)

- b) Halima is interested in buying a bond that pays 10% interest for 15 years and has a par value of Ksh. 1000 and maturity value of Ksh 924.53. He is also being offered an opportunity to buy an Equity Share whose Current dividend is Ksh 2.80 and constant growth rate is 5%. The par value of each share is Ksh 50. The rate of return in the market place is estimated to be 12%.

Required:

Calculate the intrinsic value both the bond and ordinary share and advise Halima whose objective is to maximize his wealth (8 marks)

QUESTION 5

- a) The following information was extracted from the books of a manufacturing company for the year ended 31st December 2022.

	<u>Ksh</u>
Profit for the year	120,000
Ordinary Shares (Par Value Ksh 4.8)	480,000
Accumulated retained Earnings	420,000
8% Long term liabilities	600,000
Return on Capital Employed	20%
Price Earnings Ratio	45
Earnings growth rate	5%

Required:

Compute and interpret the following Investor ratios:

- i). Interest Cover (3 Marks)
 - ii). Market Price per Share (3 Marks)
 - iii). Dividend yield (4 Marks)
- b) Describe the concept of working capital cycle with aid of a suitable diagram (10 Marks)

Table A-3 Present Value Interest Factors for One Dollar Discounted at k Percent for n Periods: $PVIF_{k,n} = 1 / (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6944	0.6504	0.6400	0.5917
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.5787	0.5245	0.5120	0.4552
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.4823	0.4230	0.4096	0.3501
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4019	0.3411	0.3277	0.2693
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3349	0.2751	0.2621	0.2072
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.2791	0.2218	0.2097	0.1594
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2326	0.1789	0.1678	0.1226
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.1938	0.1443	0.1342	0.0943
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.1615	0.1164	0.1074	0.0725
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149	0.1954	0.1346	0.0938	0.0859	0.0558
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869	0.1685	0.1122	0.0757	0.0687	0.0429
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625	0.1452	0.0935	0.0610	0.0550	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.0779	0.0492	0.0440	0.0254
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229	0.1079	0.0649	0.0397	0.0352	0.0195

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at k Percent for n Periods: $PVIFA = [1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3616	2.1662
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	2.9906	2.7454	2.6893	2.4356
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.1925	3.6819	3.5705	3.0915
11	10.368	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.3271	3.7757	3.6564	3.1473
12	11.255	10.575	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.4392	3.8514	3.7251	3.1903
13	12.134	11.348	10.635	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	4.5327	3.9124	3.7801	3.2233
14	13.004	12.106	11.296	10.563	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	4.6106	3.9616	3.8241	3.2487
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	4.6755	4.0013	3.8593	3.2682