kasneb

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 19 May 2021. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain four categories of capital investment projects. (4 marks)

(b) Nyakati Limited intends to invest in a four-year mini project whose initial outlay is Sh.32,000,000. The project is expected to generate the following cash flows at the end of each year:

Year	1	2	3	4
Cash flows (Sh. "000")	12,000	15,000	9,000	6,000

The cost of capital is 12%.

Ignore taxation.

Required:
Advise the management on whether to undertake the project using the internal rate of return (IRR) method. (4 marks)

(c) (i) Describe four reasons for valuing financial assets. (4 marks)

(ii) Hazi Limited expects to pay a dividend of Sh.5.40 per share in one year's time.

Additional information:
1. The company's dividend payout ratio is 60%.
2. The shareholders' required rate of return on equity is 15%.
3. Dividends have been growing at a constant rate in perpetuity.
4. The company's shares are currently trading at Sh.64.50 per share at the Securities Exchange.

Required:
Advise an investor who holds shares in Hazi Limited whether to buy more shares or to sell the shares. (4 marks)

(d) Propose four factors to consider when choosing between long term loan capital and ordinary share capital as a source of finance. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) The role of a finance manager in a modern organisation is pervasive in all the activities of any business firm.

In light of the above statement, highlight four roles of a finance manager in an organisation. (4 marks)

(b) Describe four factors that could affect a company's dividend policy. (4 marks)

(c) Examine five roles of the Capital Markets Authority (CMA) or a similar institution in your country. (5 marks)

(d) Eliud Mwaniki is considering investing in Security A and Security B in equal proportions. The following forecasts have been provided:

State	Probability	Returns (%) Security A	Returns (%) Security B
Recession	0.30	12	6
Stable	0.40	15	7.5
Expansion	0.30	10	5

Required:

(i) Expected return for the portfolio. (4 marks)

(ii) Standard deviation for security A. (3 marks)

(Total: 20 marks)

QUESTION THREE

(a) Explain the following concepts in the context of Islamic Finance:

(i) Takaful. (2 marks)

(ii) Riba. (2 marks)

(iii) Mudarabah financing. (2 marks)

(iv) Murabahah financing. (2 marks)

(b) The following are extracts from Riziki Ltd.'s statement of financial position as at 30 March 2021:

Book values	Sh. "Million"
Ordinary shares (Sh.50 par value)	9,600
6% preference shares (Sh.100 par value)	7,900
4.8% debenture (Sh.100 par value)	6,400
	23,900

Additional information:

1. The ordinary shares of Riziki Ltd. are currently quoted at Sh.72 per share (cum dividend).
2. The most recently declared dividend was Sh.2 per share and will be paid in a years' time. The dividend growth rate is 5%.
3. The dividend will continue to grow at the rate of 5% into the foreseeable future.
4. The preference shares currently trade at Sh. 80 per share. There is no preference dividend owing at this point in time.
5. The debentures are irredeemable and currently trade at 120% of their nominal value.
6. The corporation tax rate is 30%.

Required:

(i) The cost of capital for each source of finance for Riziki Ltd. (4 marks)

(ii) The weighted average cost of capital (WACC) for Riziki Ltd. (4 marks)

(c) ABC Limited's current annual sales are Sh.1.8 million with a cost of sales of 80% and bad debts average 1% of total sales.

The current debt collection period is one month and the management considers that if credit terms were eased (Option A), the effects would be as follows:

	Present Policy	Option A
Additional sales (%)	-	25%
Average collection period	1 month	2 months
Bad debts (% of sales)	1%	3%

Additional information:
1. The company requires a 20% return on its investments.
2. The cost of sales are 75% variable and 25% fixed.

Required:
Advise the management on whether or not to ease the credit terms. (4 marks)
(Total: 20 marks)

QUESTION FOUR

(a) Outline four factors that could hinder the success of a rights issue. (4 marks)

(b) Alpha Ltd. intends to introduce a new product, branded "Q" into the market. This will require an initial investment in machinery costing Sh.4,800,000. The machinery will be installed at a cost of Sh.200,000 and is estimated to have a useful life of four years and a salvage value of Sh.800,000.

Additional information:
1. Capital allowance will be provided on the machinery on a reducing balance basis.
2. Annual profits from the sale of Product "Q" will amount to Sh.1,920,000 before deducting depreciation on machinery.
3. An investment in working capital amounting to Sh.340,000 will be required on commencement of the project.
4. The firm pays corporation tax at the rate of 30%.
5. Cost of capital is 15% per annum.

Required:
(i) The annual depreciation rate. (3 marks)

(ii) The total initial cash outlay. (2 marks)

(iii) The total terminal cash flows. (2 marks)

(iv) The annual net operating cash flows. (5 marks)

(v) Using the net present value approach, advise the management of this company on the suitability or otherwise of the project. (4 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Discuss four factors that a firm should consider in formulating a working capital policy on the management of trade receivables. (4 marks)

(b) Phoenix Ltd. is considering amendments to its current inventory management policy.

The following information relates to the proposed ordering policy:

1. The current policy is to order 200,000 units when the inventory level falls to 70,000 units.
2. Forecast demand to meet production requirements during the next year is 1,250,000 units.
3. The cost of placing and processing an order is Sh.500, while the cost of holding a unit is Sh.1 per unit per year. Both costs are expected to be constant during the next year.
4. Orders are received two weeks after being placed with the supplier.
5. Assume one year has 50 weeks.

Required:
(i) The cost of the current ordering policy. (3 marks)

(ii) Determine the savings that could be made by using the economic order quantity (EOQ) model. (3 marks)

(c) The following data was extracted from the financial statements of Mbuni Ltd. for the year ended 31 December 2020:

Statement of financial position as at 31 December 2020:

	Sh."000"		Sh."000"
Cash	?	Notes payable	100,000
Accounts receivable	?	Long term debt	?
Plant and equipment	?	Ordinary shares	100,000
		Retained earnings	100,000
Total Assets	?	Total Liabilities	?

Additional information:

• Long term debt to equity ratio	0.5 to 1.0
• Total assets turnover	2.5 times
• Average collection period (Assume 360 days in a year and that all sales are on credit)	18 days
• Inventory turnover	9 times
• Acid test ratio	1 to 1
• Gross profit margin	0.1

Required:

Determine the following:

(i) Long term debt. (1 mark)

(ii) Total liabilities and shareholders' equity. (1 mark)

(iii) Cost of sales. (1 mark)

(iv) Inventory. (1 mark)

(v) Accounts receivable. (1 mark)

(vi) Cash. (1 mark)

(vii) Complete the statement of financial position of Mbuni Ltd. for the year ended 31 December 2020 using the figures obtained in (c) (i) to (c) (vi) above. (2 marks)

(d) Ork Limited has an outstanding Sh.2 million face value bond with a 14% coupon rate and 3 years remaining until maturity.

Interest payments are made semi-annually.

Required:

The value of this bond assuming the nominal annual required rate of return is 12%. (2 marks)

(Total: 20 marks)

Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

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CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

THURSDAY: 26 November 2020. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Islamic banking is grounded on Sharia Law. To earn money, Islamic banks use equity participation system.

Required:
With reference to the above statement:

(i) Explain the term "equity participation system". (2 marks)

(ii) Discuss three principles of Islamic finance. (6 marks)

(iii) Describe two types of financing arrangements that could be adopted under Islamic finance. (4 marks)

(b) In the context of financial markets:

(i) Distinguish between "commodities markets" and "derivatives markets". (4 marks)

(ii) Summarise four functions of financial markets. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Jaribu Ltd. has been operating in the country for many years. The directors of the company wish to raise additional capital through a rights issue in order to explore opportunities in the region. The directors have decided to make a one-for-five rights issue at a discount rate of 30% on the current market value. The company's most recent financial statements are presented below:

Income statement for the year ended 31 March 2020

	Sh."million"
Sales	1,400
Net profit before interest and taxation	52
Interest payable	24
Net profit before taxation	28
Corporation taxation	7
Net profit after taxation	21
Ordinary dividends payable	14
Retained profit for the year	7

Capital and reserves as at 31 March 2020

	Sh."million"
Sh.0.25 ordinary shares	60
Revaluation reserves	140
Accumulated profits	320
	520

Additional information:

1. The shares of the company are currently traded at the local Securities Exchange at a price to earnings (P/E) ratio of 16.
2. An investor holding 10,000 ordinary shares in the company has received the information on the forthcoming rights issue but cannot decide whether to take up the rights issue, sell the rights or allow the rights to lapse.

Required:

(i) The theoretical ex-rights price of an ordinary share. (3 marks)

(ii) The price at which the rights are likely to be traded. (1 mark)

(iii) Evaluate each of the three options available to the investor with 10,000 ordinary shares. (6 marks)

(iv) Comment on the wealth of the investor based on each of the options evaluated in (a) (iii) above. (2 marks)

(b) Nderu Suppliers Ltd. is reviewing its working capital commitments for enhanced efficiency.

The following information relating to the period ended 31 March 2020 is provided:

Turnover for the year	Sh.15,000,000
Costs as percentages of sales	**(%)**
Direct materials	30
Direct labour	25
Variable overheads	10
Fixed overheads	15
Selling and distribution	5

Additional information:

1. On average:
   - Account receivables take two and a half months before payment.
   - Raw materials are in inventory for three months.
   - Work in progress represents two months worth of half produced goods.
   - Finished goods represent one month's production.
2. Credit is taken as follows:

• Direct materials	2 months
• Direct labour	1 week
• Variable overheads	1 month
• Fixed overheads	1 month
• Selling and distribution	Half a month

3. Work in progress and finished goods are valued at material, labour and variable expenses cost.
4. Labour force is paid for 50 working weeks a year.

Required:

Assess the working capital requirements for the company. (8 marks)

(Total: 20 marks)

QUESTION THREE

(a) The following information relates to Bawabu Traders:

1. The minimum cash balance is Sh.8,000.
2. The variance of daily cash flows is Sh.4,000,000, equivalent to a standard deviation of Sh.2,000 per day.
3. The transaction cost for buying or selling securities is Sh.50.
4. The interest rate is 0.025 per cent per day.

Required:

Using Miller-Orr Model of managing cash, determine the following:

(i) The spread. (2 marks)

(ii) Upper cash limit. (2 marks)

(iii) Return point. (2 marks)

(iv) Propose a decision rule for cash management to the company based on your calculations in (a) (i) to (a) (iii) above. (2 marks)

(b) The following information was extracted from the books of Domingo General Merchants Ltd.:

Statement of financial position as at 31 December 2019:

	Sh."000"	Sh."000"
Non-current assets		10,115
Investments		821
Current assets	3,658	
Less: Current liabilities	(1,735)	1,923
Total assets		12,859
Financed by:		
Ordinary share capital: 3,000,000 shares each Sh.1		3,000
General reserves		7,125
Shareholders' funds		10,125
7% Bonds		1,300
Corporation taxation		1,434
Total equity and liabilities		12,859

Summary of profits and dividends:

Year ended 31 December	**2015**	**2016**	**2017**	**2018**	**2019**
	Sh."000"	**Sh."000"**	**Sh."000"**	**Sh."000"**	**Sh."000"**
Profit after interest and before tax	1,737	2,090	1,940	1,866	2,179
Less: Tax	(573)	(690)	(640)	(616)	(719)
Profit after interest and tax	1,164	1,400	1,300	1,250	1,460
Less: Dividends	620	680	740	740	810
Retained earnings	544	720	560	510	650

Additional information:

1. The current (1 January 2020) market value of ordinary shares is Sh.3 per share ex div.
2. The bonds are redeemable at par in ten years time.
3. The current market value of the bonds is Sh.77.10 per Sh.100 of nominal value and the annual interest has just been paid on the bonds.
4. There have been no issues or redemptions of ordinary shares or bonds during the past five years.
5. The corporate tax rate is 30%. Assume that there have been no changes in corporate tax rate for the past five years.

Required:
The weighted average cost of capital (WACC) that the company should use as a discount rate when appraising new investment opportunities. (12 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Ulanda Engineering Works Ltd. is contemplating the purchase of a new machine to replace the existing one. The existing machine was purchased two years ago at an installed cost of Sh.500,000. The machine was estimated to have an economic life of 5 years with nil salvage value but a critical analysis of its performance now shows that it is usable for the next five years with a resale value of Sh.100,000. The current disposal value of existing machine is Sh.200,000.

The new machine would cost Sh.600,000 and require Sh.50,000 in installation cost. Since the machine is not locally available, the company plans to import it and will pay import duty and freight charges of Sh.150,000 and Sh.100,000 respectively. The new machine shall require an overhaul at the end of third year which is expected to cost Sh.100,000. The overhaul cost is to be amortised on a straight line basis over the remaining useful life of the machine.

To support the increased business resulting from purchase of the new machine, accounts receivable would increase by Sh.250,000, inventories and accounts payable shall increase by Sh.200,000 and Sh.300,000 respectively.

At the end of five years, the new machine would be sold for Sh.250,000.

The estimated profit before depreciation and taxes over the next five years period for both machines are given as follows:

Year	Existing machine Sh."000"	New machine Sh."000"
1	120	260
2	150	280
3	130	250
4	145	240
5	135	270

Additional information:
1. The corporation tax rate is 30%.
2. The company uses the straight line method of depreciation.
3. The cost of capital is 13%.
4. Capital gains are tax exempt.

Required:
(i) The incremental initial cash outlay. (4 marks)

(ii) The incremental net operating cash flows associated with the proposed machine replacement. (6 marks)

(iii) Should the existing machine be replaced? Justify your answer. (4 marks)

(b) Upendo Ltd. has issued 5,000,000, Sh.20 par value ordinary shares which are presently trading at Sh.25 per share at the Securities Exchange. Upendo Ltd. has plans to issue rights to purchase one new ordinary share at a price of Sh.20 per share for every four shares held.

Required:
(i) The theoretical ex-right price of Upendo Ltd.'s share. (4 marks)

(ii) The theoretical value of a right of Upendo Ltd. before the shares sell ex-right. (2 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Donnat Ltd. has a capital structure that consists of Sh.150 million, 15% debentures and Sh.450 million in ordinary shares of Sh.20 par value.

The company adopts a 100% payout ratio as its dividend policy.

The finance manager of Donnat Ltd. intends to raise an additional Sh.20 million to finance an expansion programme and is considering two alternative financing options:

Option 1: Issue a 12% debenture stock.
Option 2: Issue additional ordinary shares of Sh.20 par value.

The corporation tax rate is 30%.

Required:
Calculate the earnings before interest and tax (EBIT) and earnings per share (EPS) at the point of indifference in firm's earnings under financing option (1) and (2) above. (8 marks)

(b) (i) Walter's model on dividend policy believes in the relevance concept of a dividend. According to this concept, a dividend decision of the company affects its valuation.

Required:
Discuss four assumptions of Walter's model. (8 marks)

(ii) Explain the risk-return trade off in the context of investments. (4 marks)

(Total: 20 marks)

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Present Value Interest factor of 1 Received at the End of *n* Periods at r Percent:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

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
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069	0.0930	0.0541	0.0320	0.0281	0.0150
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929	0.0802	0.0451	0.0258	0.0225	0.0116
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1528	0.1300	0.1108	0.0946	0.0808	0.0691	0.0376	0.0208	0.0180	0.0089
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0313	0.0168	0.0144	0.0068
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611	0.0514	0.0261	0.0135	0.0115	0.0053
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531	0.0443	0.0217	0.0109	0.0092	0.0040
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462	0.0382	0.0181	0.0088	0.0074	0.0031
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402	0.0329	0.0151	0.0071	0.0059	0.0024
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349	0.0284	0.0126	0.0057	0.0047	0.0018
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304	0.0245	0.0105	0.0046	0.0038	0.0014
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151	0.0116	0.0042	0.0016	0.0012	*
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0259	0.0189	0.0139	0.0102	0.0075	0.0055	0.0017	0.0005	*	*
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323	0.0234	0.0169	0.0123	0.0089	0.0065	0.0048	0.0014	*	*	*
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0007	*	*	*
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	*	*	*	*

Present Value Interest factors for Annuity of 1 Discounted at r Percent for *n* Periods:

$$PVIFA_{r,n} = [1 - 1/(1+r)^n]/r$$

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
16	14.718	13.578	12.561	11.652	10.838	10.106	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.6685	4.7296	4.0333	3.8874	3.2832
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	4.7746	4.0591	3.9099	3.2948
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.8178	4.8122	4.0799	3.9279	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982	5.8775	4.8435	4.0967	3.9424	3.3105
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	4.8696	4.1103	3.9539	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	4.8913	4.1212	3.9631	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	4.9094	4.1300	3.9705	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	4.9245	4.1371	3.9764	3.3254
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	4.9371	4.1428	3.9811	3.3272
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	4.9476	4.1474	3.9849	3.3286
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.1772	4.9789	4.1601	3.9950	3.3321
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.6442	8.8552	8.1755	7.5856	7.0700	6.6166	6.2153	4.9915	4.1644	3.9984	3.3330
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.6765	8.8786	8.1924	7.5979	7.0790	6.6231	6.2201	4.9929	4.1649	3.9987	3.3331
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	4.9966	4.1659	3.9995	3.3332
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	9.0417	8.3045	7.6752	7.1327	6.6605	6.2463	4.9995	4.1666	3.9999	3.3333

kasneb

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

TUESDAY: 26 November 2019. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) In the context of agency theory:

(i) Explain the "principal-agent" problem. (2 marks)

(ii) Explore two ways of addressing the principal-agent problem. (4 marks)

(b) Sasumua Ltd. is considering a review of its credit policy as a way of enhancing its working capital management:

The following information relates to the company:

- Annual sales amount to Sh.6,000,000.
- Credit sales are 80% of all sales.
- Bad debts average 3% of all credit sales.
- Average collection period for debtors is 45 days.
- Gross profit on sales is 75%.
- The company's cost of capital is 12% per annum.
- Terms of credit sales are net 60 days.

The company's credit manager is recommending a review of the credit policy of the company. The expected outcome of this action will be:

- Increase in total sales by 40%.
- Credit sales will be 60% of all sales.
- Average collection period will decrease to 30 days.
- Bad debts will increase to 5% of credit sales.
- An additional part-time credit consultant will be hired at Sh.500,000 per annum.
- Gross profit margin will increase to 80%.
- Terms of credit sales will be 5/15 net 45. All credit customers will enjoy the 5% cash discount subject to the terms.
- No change is expected in the firm's cost of capital.
- The tax rate is 30%.

Required:

Advise the company on whether to adopt the revised credit policy. (7 marks)

(c) The current capital structure of Ahadi Ltd. is given as follows:

	Sh."000"
Ordinary shares (Sh.10 each)	30,000
10% debentures	15,000
12% preference shares (Sh.20 each)	5,000
	50,000

Additional information:

1. The current market value of ordinary shares and preference shares is Sh.50 and Sh.30 respectively.
2. The debentures are irredeemable and have a market value of Sh.120 per Sh.100 nominal value.
3. The most recent earnings per share (EPS) of the company is Sh.6.
4. The company currently adopts a 60% dividend payout ratio as its dividend policy. However, the firm's future dividends are expected to grow at a rate of 7% each year for the foreseeable future.
5. Corporate tax rate is 30%.

Required:

The company's weighted average cost of capital (WACC) using market value weights. (7 marks)

(Total: 20 marks)

QUESTION TWO

(a) (i) Explain the term "cross-border" listing. (2 marks)

(ii) Discuss two benefits of cross-border listing to a quoted company. (4 marks)

(b) Maua Horticultural Ltd. runs a flower export business. The company has two sources of funds at different interest rates. The finance cost for short-term funds is 20% while the cost of long-term funds is 25%. These costs are expected to remain constant in the next two years.

The following are the projected monthly working capital requirements of the company for the year ending 31 December 2020:

Month	Working capital required (Sh."000")
January	35,000
February	35,000
March	52,500
April	70,000
May	105,000
June	157,500
July	210,000
August	242,500
September	157,500
October	87,500
November	70,000
December	52,500

Required:

(i) The average monthly permanent and seasonal working capital requirements for the company. (6 marks)

(ii) Total cost of working capital finance for the company under an aggressive financing policy, conservative financing policy and matching financing policy. (6 marks)

(iii) Advise the company on the appropriate working capital financing policy to adopt. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Using a well labelled diagram, distinguish between "systematic risk" and "unsystematic risk". (4 marks)

(b) An investor has presented the following information relating to forecasted returns of two securities, Y and Z together with their respective probabilities:

Probabilities (Pi)	Forecasted returns (%) Y	Z
0.10	10	8
0.20	12	10
0.35	8	7
0.05	15	12
0.15	14	11
0.15	9	8

Required:

(i) The standard deviation of security Y and security Z returns. (6 marks)

(ii) The relative risk of security Y and security Z. (2 marks)

(iii) Advise the investor on which of the two securities to invest in. (1 mark)

(c) Fairland Industries Ltd. has recently been listed on the securities exchange.

The company has a policy of paying out a gradually increasing dividend per share over the past five years, as indicated below:

Year	Earnings per share (EPS)	Dividend per share (DPS)
	Sh.	Sh.
2014	118	5.0
2015	125	5.5
2016	146	6.0
2017	135	6.5
2018	160	7.3

Additional information:

1. The company has recently paid the dividends for the year ended 31 December 2018. The shares are therefore quoted ex-dividend.
2. The management is considering a change in the financing policy whereby greater financing will be provided from internally generated funds. This is expected to reduce the dividend per share to Sh.5 in the year ending 31 December 2019.
3. The growth rate in earnings per share (EPS) and dividend per share (DPS) is expected to increase to 14% per annum from the year ending 31 December 2019.
4. The company's shareholders require a minimum return on investment of 16%.

Required:

(i) Using the dividend growth model, determine the market price per share (MPS) as at 31 December 2018 prior to the change in the financing policy. (3 marks)

(ii) The market price per share (MPS) as at 31 December 2018 under the new financing policy. (2 marks)

(iii) The break-even growth rate in dividend per share (DPS) using the market price calculated in (c) (i) above. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Islamic finance is considered as one of the fastest growing sub-sectors in the financial industry.

Required:

Describe three common financial products provided by Islamic finance institutions, citing how each product differs from that provided by non-Islamic financial institutions. (6 marks)

(b) Riverside Ltd. requires Sh.4,500,000 to finance an upcoming project. The firm's existing share capital constitutes 120,000 ordinary shares whose current market price per share is Sh.100. The management of the company has proposed to raise funds through a rights offering at a discount rate of 25% on current share price.

Required:

(i) The number of ordinary shares to be issued to raise the required capital. (2 marks)

(ii) The number of rights required to subscribe for one new ordinary share. (2 marks)

(iii) The theoretical ex-right market price per ordinary share. (2 marks)

(c) A financial analyst has predicted the following returns on the securities of two companies, Coral Ltd. and Reef Ltd., operating in the same industry, during the financial year ending 31 December 2019 under different states of the economy.

State of economy	Probability	Forecasted return (%)	
		Coral Ltd.	Reef Ltd.
Boom	0.20	16	14
Normal	0.60	12	10
Recession	0.20	8	6

A prospective investor is considering investing Sh.500,000 in the shares of both firms. He wishes to invest Sh.300,000 in shares of Coral Ltd. and the balance in the shares of Reef Ltd. The prospective investor feels that his 2 – asset portfolio will not only guarantee him his required return but will assist him to eliminate diversifiable risks.

Required:
On the basis of 2 - asset portfolio, determine:

(i) Portfolio's expected rate of return. (3 marks)

(ii) Portfolio's actual risk using the mathematical model. (5 marks)

(Total: 20 marks)

QUESTION FIVE

(a) The concept of interest rate capping has generated considerable interest from players in both public and private sectors, particularly in developing economies.

Required:

(i) Describe the link between interest rates and availability of credit to small and medium size enterprises (SMEs). (2 marks)

(ii) Citing three reasons, summarise the case for and against interest rate capping in an economy. (6 marks)

(b) With reference to valuation of securities, explain the distinctive features of the following valuations:

(i) Conversion value. (2 marks)

(ii) Liquidation value. (2 marks)

(iii) Market value. (2 marks)

(c) Virgin Industries had issued 72 million ordinary shares as at 31 March 2019. The company had maintained an annual dividend payment of Sh.180 million including for the year ended 31 March 2019.

On 3 April 2019, the management of the company was awarded a four year tender that would cost Sh.720 million. The directors decided to finance the tender by issuance of ordinary shares at par.

The return on investment (ROI) was expected to be 25% per annum on the cost over the next four years ending 31 March 2023.

All earnings would continue to be paid out as dividends to the shareholders.

The cost of capital is 20%.

Required:

(i) The value of an ordinary share as at 31 March 2019. (2 marks)

(ii) The value of the company as at 3 April 2019 assuming that the management made a decision to undertake the investment. (4 marks)

(Total: 20 marks)

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CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 22 May 2019. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain the following dividend theories:

(i) Information signalling theory. (2 marks)

(ii) Tax differential theory. (2 marks)

(iii) Bird-in-hand theory. (2 marks)

(iv) Agency theory. (2 marks)

(b) Clare Mwatata is planning to invest in a long-term project. An investment banker has provided her with the following two investment options:

Option 1: To invest in a corporate bond selling at Sh.875. The bond would be redeemed after 5 years at Sh.1,600.

Option 2: To invest in a 16% debenture with a face value of Sh.100 quoted at Sh.95. The debenture would be redeemed after 5 years.

The minimum required rate of return is 18%.

Required:
Using the yield to maturity (YTM) valuation model, advise Clare Mwatata in making the investment decision. (6 marks)

(c) An investor holds 1,000 ordinary shares in Upendo Ltd., a company quoted at the securities exchange. The company has been paying average dividends of Sh.1.50 per share annually in recent years.

The firm's dividends are expected to grow at a rate of 10% per annum in the coming three years, then grow at a rate of 8% per annum over the next two years and thereafter grow at a constant rate of 5% per annum into perpetuity.

The minimum required rate of return is 12%.

Required:
Using the discounted cash flow valuation method, determine the current value of the 1,000 ordinary shares of Upendo Ltd. (6 marks)

(Total: 20 marks)

QUESTION TWO

(a) Propose four reasons that might make a firm use reserves to finance its operations. (4 marks)

(b) (i) The management of Amani Limited is considering listing at the securities exchange and intends to undertake valuation of its shares.

The following information is provided:

1. The current earnings per share (EPS) of the firm is Sh.4.
2. The firm has in issue 10 million ordinary shares with a 40% dividend payout ratio.
3. The firm has an equity capital of Sh.200 million with a minimum required rate of return of 18%.

Required:
The current theoretical value of the firm's ordinary shares using dividend growth model. (6 marks)

(ii) XYZ Ltd. has a net tangible assets worth Sh.48 million and a return on assets (ROA) of 12%.

The company expects to receive a profit of Sh.10 million annually for the next 5 years.

The company has 2 million outstanding ordinary shares.

Required:
The theoretical value per share using the super-profit model. (4 marks)

(c) In an effort to lower its accounts receivable balances, Chizingo Manufacturing Limited is considering to switch from its existing no discount policy to a 2% cash discount for payment done by 15th day after sale.

It is estimated that 60% of the customers would take the discount and the average collection period is expected to decline from 60 days to 45 days.

The company's management projects an increase of 20,000 units in annual sales to 220,000 units at the existing price of Sh.2,500 per unit.

Additional information:
1. The variable cost per unit is Sh.2,100 and the average cost per unit is Sh.2,300.
2. The company requires a 15% return on investment (ROI).
3. The corporate tax rate is 30%.
4. All sales are on credit basis.
   Assume 365 days in a year.

Required:
Advise the management of Chizingo Manufacturing Limited on whether to offer the cash discount to customers. (6 marks)

(Total: 20 marks)

QUESTION THREE

(a) The capital structure of Maweni Limited is given as follows:

	Sh. "000"
Ordinary share capital (Sh.20 par value)	50,000
Retained earnings	30,000
12% irredeemable debenture capital (Sh.20 par value)	25,000
14% preference share capital (Sh.25 par value)	15,000
	120,000

Additional information:
1. The current market price of the firm's ordinary shares is quoted at Sh.45 cum-dividend.
2. The firm paid a dividend of Sh.5 per share in the just ended year.
3. The firm adopts a 60% dividend payout ratio.
4. The firm's return on equity (ROE) is 20%.
5. The existing 12% irredeemable debenture is currently trading at Sh.112 cum-interest.
6. The 14% preference shares are currently trading at Sh.33.50 cum-dividend at the securities exchange.
7. The corporate tax rate applicable is 30%.

Required:
(i) The cost of ordinary share capital. (3 marks)

(ii) The cost of 12% irredeemable debenture capital. (2 marks)

(iii) The cost of 14% irredeemable preference share capital. (2 marks)

(iv) The firm's weighted average cost of capital (WACC). (5 marks)

(b) The following is a summary of financial data for Hakika Ltd. for the financial year ended 31 December 2017 and 31 December 2018:

	2018 **Sh."000"**	**2017** **Sh."000"**
Income statement:		
Earnings before interest and tax (EBIT)	29,498	27,012
Interest	(3,106)	(3,726)
Tax	(8,694)	(7,452)
Earnings after interest and tax (EAIT)	17,698	15,834
Dividend payable	9,600	6,200

	Sh."000"	Sh."000"
Statement of financial position:		
Shareholders' funds	79,800	70,174
Long-term debt	28,000	35,000
	107,800	105,174

Additional information:

			2018	2017
1.	The number of outstanding shares ("000")		28,000	28,000
2.	Price-earnings (P/E) ratio	: Hakika Ltd.	14.00	13.00
		Industry	15.20	15.00

Required:
Calculate the following ratios for years 2017 and 2018:

(i) Return on capital employed (ROCE). (2 marks)

(ii) Interest coverage ratio. (2 marks)

(iii) Earnings per Share (EPS). (2 marks)

(iv) Dividend yield. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Credit card finance has become popular in the recent past compared to usage of cash to effect commercial transactions.

Required:
With reference to the above statement;

(i) Highlight four reasons behind the fast growth of credit card finance in your country. (4 marks)

(ii) Evaluate four limitations of using credit cards as a source of finance. (4 marks)

(b) Juhudi Industries intends to replace an existing machine with a new one which is more efficient. The existing machine was acquired 2 years ago at a cost of Sh.4 million. The useful life of this machine was originally expected to be 5 years with no salvage value. However, the valuer has now estimated that the machine shall have an economic useful life of 10 more years and a salvage value of Sh.500,000.

The new machine is estimated to cost Sh. 8 million. An additional installation cost of Sh.400,000 shall be incurred. The new machine has a useful economic life of 10 years. The financial analyst of the company estimates that the existing machine could be sold for Sh.2.5 million at the current prevailing market price.

The new machine is expected to increase sales whereby debtors would increase by Sh.320,000, inventory by Sh.140,000 while creditors would increase by Sh.300,000.
The profit before depreciation and tax over the next 10 years for the two machines is given as follows:

Year	New machine Sh."000"	Existing machine Sh."000"
1	350	280
2	400	300
3	420	320
4	410	340
5	410	340
6	380	320
7	380	310
8	350	280
9	300	260
10	280	240

Additional information:
1. The company's required cost of capital is 10%.
2. Corporate tax rate is at 30%.
3. The company uses a straight-line method of depreciation.

Required:
Using the net present value (NPV) method, advise the management of Juhudi Industries on whether to replace the existing machine with the new one. (12 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Summarise four main features of Islamic insurance mortgage (takaful). (4 marks)

(b) The capital structure of Karakara Limited which is considered optimal is given as follows:

	Sh. "000"
Ordinary share capital (Sh.10 par value)	90,000
Retained earnings	75,000
15% preference share capital (Sh.100 par value)	45,000
16% debenture capital	90,000
	300,000

The company has total assets amounting to Sh. 360 million but it is expected the assets will rise to Sh.500 million by the end of the current financial year.

Additional information:

1. New equity shares sold will net 90% after floatation costs.
2. The current market price per share (MPS) of the ordinary shares is Sh.25.
3. New ordinary shares will be issued at the current market price subject to a floatation cost of 10% of the issue price.
4. New 16% debentures can be issued at par through the securities exchange.
5. The past and expected earnings growth rate is 10%. Dividend growth rate is expected to be matched with the earnings growth rate.
6. The current earnings yield is 24%.
7. The company adopts a constant dividend payout ratio of 50%.
8. New 15% preference shares can be issued at the current selling price of Sh.120 each.
9. The retained earnings available for investment purposes is Sh.29,700,000.
10. The corporate tax rate is 30%.

Required:
The number of ordinary shares that must be sold in order to raise the required equity capital. (6 marks)

(c) (i) Explain the term "abandonment" as used in capital budgeting decisions. (2 marks)

(ii) Palakumi Agribusiness Ltd. is analysing a youth empowerment project. The following information is provided:

Year	Cash flow (Sh. "million")	Abandonment value (Sh. "million")
0	(16)	-
1	8	12
2	6	8
3	5	6
4	4	-

The company's cost of capital is 10%.

Required:
Advise the management of Palakumi Agribusiness Ltd. on the optimal time to abandon the project. (5 marks)

(d) Bidii Enterprises is a small medium enterprise (SME) in floriculture industry. The company intends to invest Sh.300,000 in a project that has a useful economic life of 4 years.

The following are the expected cash flows:

Year	**1**	**2**	**3**	**4**
Cash flows (Sh.)	140,000	120,000	80,000	60,000

The company's required rate of return is 14%.

Required:
The modified internal rate of return (MIRR) of the project. (3 marks)

(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	1069	.0930	.0708	.0541	.0320	.0193	.0118	0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	0054
18	.8360	.7002	.5674	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	.	.
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	.	.	.	.
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	.	.	.	.	.	.

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^t}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3 1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3 1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3 1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3 1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9 7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3 1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5 5553	4.9999	4.1667	3.5714	3 1250

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CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 28 November 2018. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Examine four assumptions of the Modigliani and Miller (MM) dividend irrelevance Theory. (4 marks)

(b) Differentiate between the following terms as applied in finance:

(i) "Operating leverage" and "financial leverage". (2 marks)

(ii) "Cum-right" and "ex-right" market price per share. (2 marks)

(iii) "Time value of money" and "time preference for money". (2 marks)

(c) The fixed operating cost for Gahaleni Pharmaceutical Ltd. are Sh.5.8 million per annum and the variable cost ratio is 0.20.

Additional information:

1. The company has Sh.2 million in bonds outstanding with an annual coupon interest rate of 8 per cent.
2. The company has 30,000 preference shares outstanding which pay Sh.2 dividend per share each year.
3. The company has 100,000 ordinary shares outstanding.
4. Revenues of the company are Sh.8 million per annum.
5. The company is in the 30% corporate tax bracket.

Required:

(i) The degree of operating leverage. (4 marks)

(ii) The degree of financial leverage. (3 marks)

(iii) The degree of combined leverage. (3 marks)

(Total: 20 marks)

QUESTION TWO

(a) Describe four limitations of the net present value (NPV) method of investment appraisal. (4 marks)

(b) The management of Bundacho Limited is in the process of evaluating two projects, namely Alpha and Beta.

The estimated pre-tax cash flows of each of the projects are as follows:

Year	Project Alpha Pre-tax cash flows Sh. "000"	Project Beta Pre-tax cash flows Sh. "000"
1	2,590	4,300
2	2,880	3,290
3	3,050	3,200
4	2,950	3,700
5	-	4,850
6	-	4,420

Additional information:

1. Project Alpha costs Sh.3.8 million and has an estimated lifespan of 4 years.
2. Project Beta costs Sh.8 million with an estimated lifespan of 6 years.
3. Both projects have a zero salvage value.
4. An investment in working capital of Sh.825,000 will be required irrespective of the project to be undertaken.
5. The cost of capital for the company is 12%.
6. The corporate tax rate is 30%.

Required:
Using the discounted payback period method, recommend to the management of Bundacho Limited on which project to undertake. (8 marks)

(c) The earnings per share (EPS) and dividend per share (DPS) data for Maraba Ltd. over the last five years are provided below:

Year	Dividend per share (DPS) (Sh.)	Earnings per share (EPS) (Sh.)
2013	1.00	2.50
2014	1.10	2.70
2015	1.20	3.00
2016	1.50	3.20
2017	1.80	3.50

Additional information:

1. A prospective investor is considering buying the shares of this company which are currently selling at Sh.55 each at the securities exchange.
2. The investor's required rate of return is 20%.

Required:
Advise the investor on whether to buy the shares of Maraba Ltd. using Gordon's model. (8 marks)
(Total: 20 marks)

QUESTION THREE

(a) Propose four factors that might lead to soft capital rationing in a limited company. (4 marks)

(b) Explain four roles that are played by insurance companies in the financial market of your country. (4 marks)

(c) Bemunyonge Ltd. has just paid a dividend of Sh.4 per share. The company expects that the dividend will grow at the rate of 20% per annum for the first two years, then grow at the rate of 10% per annum for the next 2 years and thereafter grow at the rate of 6% per annum into perpetuity. The required rate of return for the company is 16%.

Required:
The theoretical value of the company's share. (4 marks)

(d) Bahati Enterprises is considering amendments to its current credit policy. The firm's current annual credit sales amount to Sh.6,000,000.
The current credit terms are net 30 with an average debtors collection period of 45 days.

The following information relates to the proposed credit policy:

1. The credit period to be extended to net 60.
2. Annual sales are expected to increase by 20%.
3. Bad debts are expected to increase from 2% to 2.5% of the annual credit sales.
4. Credit analysis and debt collection costs are expected to increase by Sh.84,000 per annum.
5. The return on investment in debtors is 12%.
6. For every Sh.100 of sales, Sh.75 is the variable cost.
7. Assume one year has 360 days.

Required:
Advise the management of Bahati Enterprises on whether to adopt the proposed credit policy. (8 marks)
(Total: 20 marks)

QUESTION FOUR

(a) The following are the financial statements for ABC Ltd. and XYZ Ltd. for the year ended 30 September 2018:

Income statement for the year ended 30 September 2018:

		ABC Ltd. Sh. "million"		XYZ Ltd. Sh. "million"
Revenues		4,000		6,000
Cost of sales		(3,000)		(4,800)
Gross profit		1,000		1,200
Expenses:				
Distribution costs	200		150	
Administration expenses	290		250	
Finance costs	10	(500)	400	(800)
Profit before tax		500		400
Tax paid		(120)		(90)
Profit after tax		380		310
Dividends paid		(150)		(100)
Retained profits for the year		230		210
Retained profit brought forward		220		2,480
Retained profit carried forward		450		2,690

Statement of financial position as at 30 September 2018:

		ABC Ltd. Sh. "million"		XYZ Ltd. Sh. "million"
Non-current assets:				
Land and buildings		1,200		5,000
Furniture and motor vehicles		600		1,000
		1,800		6,000
Current assets:				
Inventories	400		800	
Trade receivables	850		750	
Financial assets	100		230	
Cash at bank	-	1,350	100	1,880
		3,150		7,880
Financed by:				
Equity and liabilities:				
Ordinary share capital		1,000		1,600
Retained profits		450		2,690
		1,450		4,290
Non-current liabilities:				
Bank loan		500		3,000
Current liabilities:				
Trade payables	1,080		590	
Bank overdraft	120	1,200	-	590
		3,150		7,880

Required:

(i) Vertical common size statements of income for the year ended 30 September 2018. (6 marks)

(ii) Vertical common size statements of financial position as at 30 September 2018. (6 marks)

(b) NewWays Ltd. intends to raise new capital to expand its production level.

The company plans to undertake the following financial decisions:

1. Issue 200,000 ordinary shares which have a par value of Sh.10 at Sh.16 per share. The floatation cost per share is Sh.1.

2. Issue 75,000, 12% preference shares which have a par value of Sh.20 at Sh.18 per share. The total floatation cost is Sh.150,000.
3. Issue 50,000, 18% debentures which have a par value of Sh.100 at Sh.80 per debenture.
4. Borrow Sh.5,000,000, 18% long-term loan. The total floatation cost is Sh.200,000.

Additional information:
1. The company paid 28% ordinary dividends which is expected to grow at the rate of 4% per annum.
2. The corporate tax rate is 30%.

Required:
(i) The total capital to be raised net of floatation costs. (2 marks)

(ii) The weighted marginal cost of capital (WMCC) for the company. (6 marks)
(Total: 20 marks)

QUESTION FIVE
(a) Highlight four circumstances under which investors might find it suitable to use an Islamic equity fund. (4 marks)

(b) William Mgunya intends to invest Sh.200,000 in a redeemable 12%, Sh.100 debentures for 3 years. The current market value of the debentures is Sh.80 per debenture.

The required rate of return on the debentures is 10% per annum.

Required:
Advise William Mgunya on whether to invest in the debentures. (4 marks)

(c) Daima Investment Bank has provided the following information relating to two of its securities namely; A and B:

State of economy	Probability (P_i)	Security returns (%) A	Security returns (%) B
Stable	0.30	12	6
Expansion	0.40	15	7.5
Recession	0.30	10	5

Required:
(i) The expected return for each security. (2 marks)

(ii) The standard deviation for each security. (2 marks)

(iii) The correlation coefficient between the two securities' returns. (3 marks)

(iv) Determine the expected return of a portfolio constituting 60% of Security A and 40% of Security B. (2 marks)

(v) Compute the risk of the portfolio in (c) (iv) above. (3 marks)
(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	.1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	.1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	.0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

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CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 23 May 2018. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain three working capital financing policies and their implications in an organisation. (6 marks)

(b) Chauringo Limited wishes to expand its business. The company is considering to issue Sh.50 million worth of redeemable bonds denominated in Sh.1,000. The bond's rate of interest is 10% and will mature on 30 June 2028. The bonds will be issued on 1 July 2018. The cost of capital is 18% per annum for the whole period.

Required:

(i) The current value of the bond. (3 marks)

(ii) The par value of the bond. (2 marks)

(c) Maandani Enterprises maintains a minimum cash balance of Sh.10,000. The standard deviation of the daily cash flows is Sh. 2,500. The transaction cost of each marketable security is Sh.20. The interest rate of a marketable security is 9.2% per annum. Assume 365 days in a year.

Required:

Using the Miller-Orr model of cash management, determine:

(i) The optimal cash balance. (3 marks)

(ii) The upper cash limit. (2 marks)

(iii) The average cash balance. (2 marks)

(iv) The spread. (2 marks)

(Total: 20 marks)

QUESTION TWO

(a) Explain three assumptions of the Gordon's dividend model. (6 marks)

(b) Kubusa Ltd. is contemplating the acquisition of a new machine to replace the one currently being used in production process. The existing machine was acquired 2 years ago at a cost of Sh.8 million. The existing machine was estimated to have a useful life of 5 years with no salvage value. However, a critical analysis of the machine now shows that the machine is usable for the next 5 years with a salvage value of Sh.1.5 million. The existing machine can be disposed of now at Sh.4 million.

The new machine is expected to cost Sh.12.56 million with a salvage value of Sh.4 million at the end of its useful life of 5 years. The new machine will also require an additional investment in working capital of Sh.2.6 million at the start of its useful life which will however be recovered at the end of its useful life.

The following information relates to the estimated earnings before depreciation and tax (EBDT) over the coming five year period for the two machines:

Year	New machine (Sh. "000")	Existing machine (Sh. "000")
1	5,400	3,200
2	5,400	2,800
3	5,400	3,000
4	5,400	2,400
5	5,400	2,000

Kubusa Ltd.'s cost of capital is 13%. The company applies straight-line method of depreciation.

The corporate tax rate is 30%.

Required:
Using the net present value (NPV) technique, advise the management of Kubusa Ltd. on whether to replace the existing machine with the new machine. (14 marks)
(Total: 20 marks)

QUESTION THREE

(a) Argue three cases for and three cases against the use of market values for various components of cost of capital in determining the weighted average cost of capital (WACC) of a firm. (6 marks)

(b) Akiba Limited has the following capital structure:

	Sh. "000"
3,000,000 fully paid ordinary shares	30,000
Retained earnings	20,000
1,000,000 10% preference shares	20,000
6% debentures (Sh.150 par value)	30,000

Additional information:
1. The current market price per share (MPS) is Sh.30.
2. The expected dividend per share in the following year is Sh.1.20.
3. The average growth rate in both earnings and dividends has been maintained at 10% over the last 10 years. The trend is expected to remain the same into the foreseable future.
4. The debentures are trading at Sh.110 at the securities market.
5. The debentures mature in 100 years period.
6. The preference shares were issued 4 years ago and they are still trading at face value.
7. The corporate tax rate is 30%.

Required:
Weighted average cost of capital (WACC) for the company. (8 marks)

(c) The profit after tax of Muhendato Ltd. as at 30 April 2017 was Sh.6,500,000. The company is quoted at the securities exchange and its shares are currently selling for Sh.40 each.
The company's dividend policy is to pay out 40% of its earnings for the year as dividends on its 1,000,000 issued and fully paid up shares.
The company's profit after tax is expected to increase by 15% per year for three years and 8% per year thereafter.
Dividends will grow at the same rate as profits of the company.
The shares of the company are expected to sell at Sh.64 per share at the end of five years from now.
The cost of capital for the company is 12% per annum.

Required:
Determine whether the shares of Muhendato Ltd. are currently fairly valued, undervalued or overvalued for an investor expecting to sell them after 5 years. (6 marks)
(Total: 20 marks)

QUESTION FOUR

(a) Explain the following terms as used in Islamic finance:

(i) Ijara. (2 marks)

(ii) Sukuk. (2 marks)

(b) Distinguish between the terms "capital market" and "money market". (2 marks)

(c) (i) Describe two types of capital rationing in capital budgeting. (4 marks)

(ii) Amani Contractors Ltd. is intending to invest in four independent projects. The following information relates to the four projects:

Project	**A**	**B**	**C**	**D**
Present values of cash inflows (Sh. "million")	50	60	100	70
Initial outlay (Sh. "million")	(30)	(45)	(60)	(40)
Net present values (Sh. "million")	20	15	40	30

Additional information:

1. The company has a capital limitation of Sh.90 million.
2. The company's required rate of return is 10%.
3. Any surplus funds can be re-invested to generate a return of net cash flow of 14% in perpetuity.
4. The projects are indivisible.
5. The projects can be combined to achieve a higher return subject to the company's capital limitation.

Required:

Advise on the optimal project combination. (5 marks)

(d) Maua Ltd. is in the process of completing construction of a green house.
The finance manager has estimated that the project's useful life is 15 years and shall generate the following cash flows:

Years	**Cash flows (Sh. "000")**
1 - 5	5,000
6 - 10	9,000
11 - 15	4,000
	18,000

The required rate of return for the company is 10%.

Required:

The total present value of the project. (5 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Distinguish between "financial planning" and "financial forecasting". (2 marks)

(b) Explain four benefits that might accrue from demutualisation of securities exchange of your country. (4 marks)

(c) Furunzi Express Ltd.'s records got lost in a fire that burnt down the accounts office.

The following information was however obtained from the laptop of the accountant for the year ended 31 December 2017:

Opening stock	Sh.450,000
Stock turnover ratio	10 times
Net profit margin	15%
Gross profit margin	20%
Current ratio	4:1
Long-term loan	Sh.1,000,000
Depreciation of fixed assets (10%)	Sh.100,000
Closing stock	Sh.510,000

Additional information:

1. Credit period allowed by suppliers is one month.
2. Average debt collection period is 2 months.
3. On 31 December 2017, current assets consisted of stock, debtors and cash only.
4. There was no bank overdraft.
5. All purchases are made on credit.
6. Cash sales were ¼ of total sales.

Required:

(i) Cost of sales. (2 marks)

(ii) Gross profit. (2 marks)

(iii) Total sales. (2 marks)

(iv) Total purchases. (2 marks)

(v) Net profit. (2 marks)

(vi) Debtors value. (2 marks)

(vii) Creditors value. (2 marks)

(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	6575	.6407	6086	.5787	.5245	.4768	.4348	3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5674	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2 5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3 1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3 1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3 1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3 1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3 1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3 1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5 5553	4.9999	4.1667	3.5714	3 1250

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CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 29 November 2017. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain four factors that might be considered when establishing an effective credit policy in an organisation. (4 marks)

(b) Summarise four hindrances to international standardisation of Islamic finance. (4 marks)

(c) Illustrate how the problem of window dressing manifests itself in measuring business performance using financial ratio analysis. (4 marks)

(d) The management of Gumbo Ltd. intends to change the company's credit policy from 'net 30' to '3/10 net 60'. If this change is effected, annual sales are expected to increase by 25% from the current level of Sh.12 million. The proportion of bad debts is also expected to increase from 10% to 15% of the credit sales.

A new credit assistant officer will also have to be employed at a salary of Sh.500,000 per annum. If there is a change in the firm's credit policy, it is expected that 60% of the credit customers will benefit from the cash discount offer.

The inventory level and variable costs are however expected to remain constant at 20% and 40% of the annual sales respectively. The firm's rate of return on investment is 14% per annum.

The corporate tax rate is 30%.

All sales are on credit.

Assume a 360-day financial year.

Required:

Advise the management of Gumbo Ltd. on whether to adopt the new credit policy. (8 marks)

(Total: 20 marks)

QUESTION TWO

(a) Explain four limitations of dividend growth model. (4 marks)

(b) Maji Mazuri Ltd. an all equity financed company has an issued share capital of Sh.10 million ordinary shares of Sh.10 par value. The company paid a dividend of Sh.0.4 per share last period and the market price per share is Sh.20 ex-dividend.

The company is contemplating raising additional funds through a rights issue. The management has proposed a 1 for 4 rights issue at an issue price of Sh.15 per share. The funds raised are intended to be used to finance a major new project which is expected to increase the company's annual after tax cash flows by Sh.950,000 in perpetuity.

Required:

(i) The cum-right market price per share (MPS) after the announcement of the rights issue. (4 marks)

(ii) The theoretical ex-right market price per share. (2 marks)

(iii) The theoretical value of each right. (2 marks)

(c) Evaluate the impact of the rights issue in (b) above on the value of wealth of an existing shareholder who holds 1,600 ordinary shares in Maji Mazuri Ltd. and Sh.10,000 in his savings account assuming that this shareholder decides to:

(i) Exercise all his rights. (3 marks)

(ii) Sell all his rights. (3 marks)

(iii) Ignore the rights issue. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) The ordinary shares of Kwekwe Ltd. are currently selling at Sh.60 each at the securities exchange. The company's price-earnings ratio is 6 times.

Kwekwe Ltd. adopts a 40% pay-out ratio as its dividend policy.

It is predicted that the company's earnings and dividends will grow at an annual rate of 10% for the first three years, 5% for the next two years and 4% thereafter in perpetuity.

The investors' minimum required rate of return is 12%.

Required:

(i) The current intrinsic value of the shares. (6 marks)

(ii) Advise the investors based on the result obtained in (a) (i) above. (2 marks)

(b) Ray Properties Ltd. is planning to build a business mall. The project will cost Sh.180 million.

The firm's current optimal capital structure is as follows:

	Sh."000"
Ordinary shares (Sh.10 par value)	480,000
10% debt (Sh.100 par value)	384,000
Retained profit	96,000
	960,000

Additional information:

1. The firm will issue a new 15% debenture at Sh.120 each with a floatation cost of Sh.10 per unit. The par value of each debenture is Sh.100.
2. New ordinary shares will be issued at the current market price of Sh.30 each with a floatation cost of Sh.5 per share.
3. The most recent dividend paid by the company was Sh.5 per share.
4. The dividend is expected to grow at the rate of 5% per annum in perpetuity.
5. The firm expects to retain Sh.18 million to finance this investment.
6. The corporate tax rate is 30%.

Required:

(i) The amount to be raised from equity capital, if the capital structure is to remain unchanged. (3 marks)

(ii) The number of ordinary shares the company should issue to raise the desired external equity capital. (3 marks)

(iii) The firm's weighted marginal cost of capital (WMCC). (6 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Describe four types of money market instruments. (4 marks)

(b) Highlight three agency costs that might arise in the principal-agent relationship between shareholders and managers. (3 marks)

(c) Karem Bottling Company is considering replacing one of the bottling machines with a more efficient one.

The old machine has a current net book value of Sh.2,400,000 with a remaining useful life of five years. The old machine has an estimated re-sale value of Sh.200,000 at the end of its useful life.

The existing machine's current disposal value is estimated to be Sh.1,060,000.

The new machine has a purchase price of Sh.4,700,000 and an estimated useful life of 5 years. The machine is expected to have an estimated market value of Sh.600,000 at the end of the five years.

The machine is expected to economise on electric power usage and repair costs which will save the company Sh.920,000 each year. In addition, the new machine is expected to reduce the number of defective bottles which will save an additional amount of Sh.120,000 annually.

The company's corporate tax rate is 30% with a required rate of return of 12%.

The company provides for depreciation on a straight line basis.

Assume capital gains are taxable.

Required:

(i) The initial net cash outlay. (3 marks)

(ii) The incremental net operating cash flows for years 1 through year 5. (4 marks)

(iii) The total terminal cash flows. (2 marks)

(iv) Using net present value (NPV) criteria, advise the management of Karem Bottling Company whether or not to purchase the new machine. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Describe three factors that have limited the growth of venture capital investment in most developing countries. (6 marks)

(b) Deye Ltd. has provided the following financial results:

Year	Profit after tax (Sh."million")
2014	6.0
2015	6.2
2016	6.3
2017	6.3

The firm's earnings yield is 12%.

Required:

The value of the firm based on the present value of the expected earnings approach. (4 marks)

(c) A prospective investor is intending to buy ordinary shares of a firm listed at the securities exchange whose market price per share is Sh.30.

The forecasted market price per share for the following five months is estimated as follows:

Month	Forecasted market price per share (Sh.)	Probability
1	33	0.2
2	30	0.1
3	27	0.3
4	36	0.15
5	39	0.25

Required:
The expected return from the investment. (4 marks)

(d) Chitsaka Limited estimates that it requires Sh.12,000,000 for its operations during the following year.

The company will sell marketable securities and deposits into a cost-free no-interest bank account.

The marketable securities currently provide an interest yield of 5% per year.

The cost of selling marketable securities is Sh.60 per transaction regardless of the size of the transaction.

Assume a 365-day financial year.

Required:
Using the Baumol cash management model, determine:

(i) The optimal size of transaction for selling the marketable securities. (4 marks)

(ii) The frequency with which the securities should be sold. (2 marks)

(Total: 20 marks)

....

Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	:7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	6750	6575	.6407	.6086	.5787	.5245	.4768	4348	3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	4972	.4761	.4371	.4019	.3411	2910	2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	:1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	1069	.0930	.0708	.0541	.0320	.0193	.0118	0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	.	.
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	.	.	.	.
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	.	.	.	.	.	.

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1-\frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

KASNEB

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 24 May 2017. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Highlight four limitations of long-term debt finance to an organisation. (4 marks)

(b) Discuss the relevance of cost of capital to a business enterprise. (6 marks)

(c) Upendo Ltd.'s existing capital structure is given as follows:

	Sh."000"
Ordinary share capital (Sh.20 par)	20,000
Reserves	5,000
10% Debenture (Sh.100 par)	10,000
8% Preference shares (Sh.20 par)	15,000
	50,000

Additional information:

1. The most recent earnings per share (EPS) of the company is Sh.5.
2. The firm adopts 40% pay-out ratio as its dividend policy.
3. Ordinary shares of the company are currently selling for Sh.50 each.
4. The existing 10% debenture is currently trading at 110% of par at the securities exchange.
5. Existing 8% preference shares are currently trading at Sh.25 each.
6. Corporate tax rate applicable is 30%.

Required:

(i) The annual dividend growth rate using Gordon's growth model. (2 marks)

(ii) Cost of ordinary share capital. (2 marks)

(iii) Cost of 10% debenture capital. (1 mark)

(iv) Cost of 8% preference share capital. (1 mark)

(v) The weighted average cost of capital (WACC) of the firm. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) The following information was extracted from the financial statements of Mwaka Limited:

Earnings per share (EPS)	Sh.15
Capitalisation rate	12%
Retention ratio	40%
Internal rate of return	16%

Required:

The price per share under:

(i) Gordon's growth model. (4 marks)

(ii) Walter's model. (4 marks)

(b) Nyadzua Limited is making a 1 for 4 rights issue costing Sh.6.40. The company has 4 million shares in issue with a market price of Sh.10.80 per share. The new shares are expected to yield 5% earnings and price to earnings (P/E) ratio of 10.

Required:

(i) The theoretical ex-right price. (4 marks)

(ii) The value per share after the rights issue. (4 marks)

(c) The 10% Sh.100 par value convertible bond of Kurawa Limited is quoted at 142% of par.

The earliest date for conversion is in 4 years' time, at the rate of 30 ordinary shares per Sh.100 nominal bond. The share is currently trading at a price of Sh.4.15. The annual coupon on the bond has just been paid.

Required:

(i) Conversion premium. (3 marks)

(ii) Interpret the answer obtained in (c) (i) above. (1 mark)

(Total: 20 marks)

QUESTION THREE

(a) The following information relates to Tsuma Enterprises Ltd. for the four months given below:

		Sh."Million"
Sales:	September	60
	October	60
	November	70
	December	90

All sales will be made on credit.

Half of the debtors are expected to pay within the month of sale and are also expected to claim a 2% cash discount. The remaining debtors are expected to pay by the beginning of the following month.

Raw materials purchases	Sh."Million"
September	20
October	40
November	40
December	30

The firm plans to pay its creditors in full in the month following that of purchase.

Wages and salaries:	Sh."Million"
September	12
October	15
November	17
December	13

Additional information:

1. All employees are paid in the month in which the wage or salary is earned.
2. Rent of Sh.10 million for each quarter is paid in March, June, September and December.
3. Other cash overheads of Sh.2 million per month are payable.
4. A new plant due for delivery in September will be paid in November at a cost of Sh.25 million.
5. On 1 October, the firm plans to have Sh.10 million in the bank.

Required:

A cash budget for the three months ending in December. (10 marks)

(b) Roka Limited has two mutually exclusive projects namely; project A and project B with initial cash outlay of Sh.50,000 each. The projects have a useful life of 5 years. The company's cost of capital is 12% with a corporate tax rate of 30%.

The expected cash flows for the projects before depreciation and tax are given below:

Year	Project A Sh."000"	Project B Sh."000"
1	42	62
2	42	32
3	42	22
4	42	52
5	42	52

The company uses straight line method of depreciation.

Required:
Using the profitability index approach, advise the management of Roka Limited on the project to consider. (10 marks)
(Total: 20 marks)

QUESTION FOUR

(a) The following are the summarised financial statements for Bokasa Limited.

Bokasa Limited statement of financial position as at 31 December:

		2015		2016
	Sh."000"	**Sh."000**	**Sh."000"**	**Sh."000"**
Non-current assets		4,995		12,700
Current assets:				
Inventory	40,145		50,455	
Accounts receivable	40,210		43,370	
Cash at bank	12,092		5,790	
		92,447		99,615
Total assets		97,442		112,315
Current liabilities:				
Accounts payable	34,389		39,215	
Taxation	2,473		3,260	
	36,862		42,475	
Long-term liabilities:				
10% loan notes	19,840		19,480	
Total liabilities		(56,702)		(62,315)
Net assets		40,740		50,000
Equity:				
Called-up share capital Sh.0.25 per share		9,920		9,920
Retained earnings		30,820		40,080
Shareholders' funds		40,740		50,000

Bokasa Limited income statement for the year ended 31 December:

	2015 Sh."000"	2016 Sh."000"
Revenue	486,300	583,900
Operating profit	17,238	20,670
Interest payable	(1,984)	(1,984)
Profit before taxation	15,254	18,686
Taxation	(5,734)	(7,026)
Profit for the year	9,520	11,660

		31 December 2015 Sh."000"	31 December 2016 Sh."000"
Notes:			
1.	Retained profit brought forward	23,540	30,820
2.	Dividends paid during the year	2,240	2,400

Required:
For each of the two years, calculate:

(i) Earnings per share (EPS). (2 marks)

(ii) Dividend cover. (2 marks)

(iii) Current ratio. (2 marks)

(iv) Acid test ratio. (2 marks)

(v) Return on capital employed (ROCE). (2 marks)

(b) Luri Limited has a bond that has 3 years to maturity. The bond's par value is Sh.1,000. Coupon payment for the bond is made annually. The current market value of the bond is 120% of par with a coupon of 12%.

Required:
The yield to maturity (YTM). (4 marks)

(c) (i) Highlight four objectives of the core principles for islamic finance regulation (CPIFR) as set out in Islamic Financial Services Board (IFSB). (4 marks)

(ii) Differentiate between "Salam contract" and "Istina contract" as used in Islamic finance. (2 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Highlight four factors that might influence a company when establishing a dividend policy. (4 marks)

(b) Summarise four assumptions of the efficient market hypothesis (EMH). (4 marks)

(c) The goal of profit maximisation is considered to be a short-term objective with long-term survival. The firm's growth cannot be achieved without continuous profitability.

Required:
In relation to the above statement, summarise four arguments in favour of and four arguments against profit maximisation as a business goal. (8 marks)

(d) Downtop Ltd. has achieved earnings of Sh.6 million this year and the company intends to pursue a policy of financing all its investment projects from retained earnings. There are a number of investment opportunities available for Downtop Ltd., although if it does not undertake any of the projects, its annual retained earnings are expected to remain at Sh.6 million in perpetuity.

The following information is available for Downtop Ltd.:

Proportion of retained earnings (%)	Growth rate in earnings (%)	Required return on all investments by shareholders (%)
0	0	16
30	6	17
45	9	19

Required:
Using dividend growth model, determine the optimum retention policy for Downtop Ltd. (4 marks)

(Total: 20 marks)

....

Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	.8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	.1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	.3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	.1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	.0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

KASNEB

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 23 November 2016. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain four disadvantages of public private partnerships (PPPs). (8 marks)

(b) Describe six steps involved in personal financial planning. (6 marks)

(c) The following data was extracted from the financial statements of XYZ Limited for the year ended 30 September 2016.

Total assets	Sh.7,000,000
Total liabilities	Sh.4,000,000
Preference share capital	Sh.500,000
Earnings per share (EPS)	Sh.1.10
Price-earnings (P/E) ratio	15
Outstanding number of ordinary shares	400,000

Required:

(i) Book value per share. (2 marks)

(ii) Market price per share. (2 marks)

(iii) Market value to book value ratio. (2 marks)

(Total: 20 marks)

QUESTION TWO

(a) Discuss three possible solutions to adverse selection. (6 marks)

(b) Sandy Ltd. presented the following extracts of the statement of financial position as at 31 October 2016:

	Sh. "000"	Sh. "000"
Equity		
Ordinary shares (Sh.5 nominal value)	800,000	
Reserves	3,600,000	4,400,000
Long term liabilities		
4% preference shares (Sh.1 nominal value)	600,000	
7% bonds (redeemable after 6 years)	600,000	
Long term bank loan	200,000	1,400,000

Additional information:

1. Ordinary shares of Sandy Ltd. have an ex-div market value of Sh.47.00 per share and an ordinary dividend of Sh.3.63 per share has just been paid.
2. The following dividends have been paid over the past four years:

Year	**2013**	**2014**	**2015**	**2016**
Dividend per share (Sh.)	3.09	3.22	3.36	3.50

3. The preference shares are not redeemable and have an ex-div market value of 40 cents per share.
4. The 7% bond is redeemable at 5% premium to their nominal value of Sh.100 per bond and have an ex-interest market value of Sh.104.50.

5. The bank loan has a variable interest rate that has averaged 4% per year in recent years.
6. The corporate tax rate is 30%.

Required:

(i) The weighted average cost of capital (WACC). (10 marks)

(ii) Explain four reasons why the cost of equity could be greater than the cost of debt. (4 marks)

(Total: 20 marks)

QUESTION THREE

(a) The management of Georgina Ltd. wishes to establish the amount of external financial needs for the year ending 31 December 2016. The statement of financial position of the company as at 31 December 2015 was as follows:

	Sh."000"
Plant and machinery	31,200
Furniture and fittings	18,720
Motor vehicles	12,480
Inventory	19,200
Account receivables	14,400
Cash and bank	3,600
	99,600
Financed by:	
Ordinary share capital	42,000
Retained profit	17,600
14% debenture capital	10,000
Account payables	18,000
Accrued expenses	12,000
	99,600

Additional information:

1. The sales for the year ended 31 December 2015 amounted to Sh.120,000,000.
2. The company forecasts that sales will increase by 10% for the year ending 31 December 2016.
3. For the year ended 31 December 2015, the after-tax profit of the company amounted to Sh.18,000,000.
4. The company adopts 80% payout ratio as its dividend policy. The payout ratio is expected to remain constant each year in perpetuity.
5. The after-tax profit margin is also expected to remain constant each year.
6. Assets are expected to vary directly with sales while account payables and accrued expenses form the spontaneous sources of financing.
7. Any external financing will be effected through long term debt financing.

Required:

(i) The amount of external 12% long term debt financing that would be required for the year ending 31 December 2016. (4 marks)

(ii) A forecast statement of financial position as at 31 December 2016. (6 marks)

(iii) Comment on two weaknesses of the method of forecasting applied in (a)(i) and (a)(ii) above. (2 marks)

(b) The following information was extracted from the financial statements of a manufacturing company:

	Sh.
Average total debtors outstanding	48,000
Raw materials consumption	440,000
Total production cost	1,000,000
Total cost of sales	1,050,000
Sales for the year	1,600,000
Value of average stock maintained:	
Raw material	32,000
Work in progress	35,000
Finished goods	26,000
Number of days in a year	365
Average period of credit allowed to suppliers	16 days

Required:

(i) The operating cycle in days. (6 marks)

(ii) The amount of working capital required. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Bundacho Ltd. generated Sh.50 million profit after-tax in the previous financial year. The firm adopts 40% payout ratio as its dividend policy. The total number of issued ordinary shares are 10,000,000.

The company has a potential investment opportunity. If undertaken, dividends are expected to grow at the rate of 10% each year for the first 3 years and then stabilise at the rate of 5% each year thereafter in perpetuity.

The investor's minimum required rate of return is 18%.

Required:
The current intrinsic value of the share. (6 marks)

(b) A firm issued 10% preference shares to raise funds. The shares have a par value of Sh.100 each and are currently selling at Sh.110 each.

The minimum required rate of return by the investors is 8%.

Required:
Explain whether the share is overvalued or undervalued by the market. (4 marks)

(c) Mwarakaya Ltd. is considering the acquisition of a new machine to replace the existing machine currently being used in production processes. The existing machine was acquired 2 years ago at a cost of Sh.2,000,000. It was originally estimated to have a useful life of 5 years with no salvage value.

A critical evaluation of the machine now shows that the machine is usable for another 5 years with a salvage value of Sh.250,000 at the end of this period. The disposal value of the existing machine is currently estimated at Sh.1,250,000.

The new machine is estimated to cost Sh.3,140,000 and its estimated salvage value is Sh.1,000,000 at the end of its useful life of 5 years. The new machine will also require an additional investment in working capital of Sh.650,000 at the start of the asset's useful life.

The investment in working capital will however be recovered at the end of the 5 years useful life.

The following information relates to the estimated earnings before depreciation and tax (EBDT) over the coming five-year period for the two machines.

Year	New machine Sh.	Existing machine Sh.
1	1,400,000	800,000
2	1,350,000	700,000
3	1,300,000	750,000
4	1,450,000	650,000
5	1,200,000	600,000

The cost of capital is 10% and the firm applies the straight line method of depreciation.
The corporate tax rate is 30%.

Required:
Using the net present value (NPV) technique, advise the company's management on whether to replace the existing machine. (10 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Explain the following terms as used in the bond market:

(i) Yield-to-maturity (YTM). (2 marks)

(ii) Yield-to-call (YTC). (2 marks)

(b) Kaoyeni Limited has issued a Sh.10,000 par value 10-year bond with a coupon rate of 12% per annum. The bond is currently trading at Sh.8,830 and is callable at Sh.10,500 after 5 years.

The company pays interest on its bonds semi-annually.

Required:

(i) Yield-to-maturity of the bond. (3 marks)

(ii) Yield-to-call of the bond. (3 marks)

(c) The following data was extracted from Mwakuhenga Limited's financial statements for the year ended 30 June 2016:

	Sh.
Total sales	3,000,000
Variable costs	(900,000)
Contribution	2,100,000
Fixed costs	(1,500,000)
Earning before interest and tax (EBIT)	600,000
Interest	(75,000)
Profit before tax	525,000

Required:

Using the concept of leverage, determine:

(i) The percentage taxable income if EBIT increases by 6%. (3 marks)

(ii) The percentage EBIT if there is a 10% increase in sales. (3 marks)

(iii) The percentage taxable income if sales increase by 8%. (4 marks)

(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	6750	.6575	.6407	.6086	.5787	.5245	.4768	4348	3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	.4972	.4761	.4371	.4019	.3411	2910	2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3 1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3 1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3 1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3 1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3 1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5 5553	4.9999	4.1667	3.5714	3 1250

KASNEB

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 25 May 2016. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Explain four principles of capital budgeting. (8 marks)

(b) A firm is considering the following investment projects:

	Cash flows (Sh.)			
	Year 0	Year 1	Year 2	Year 3
Project				
A	1,000,000	500,000	500,000	-
B	1,000,000	-	650,000	850,000
C	1,000,000	300,000	500,000	1,000,000
D	1,000,000	800,000	400,000	400,000

The firm's opportunity cost of capital is 15%.

Required:

(i) Rank the projects using payback period method. (3 marks)

(ii) Rank the projects using net present value (NPV) method. (3 marks)

(c) Chigiri Ltd. is a private company which intends to be listed in the securities exchange. The company has recently made a dividend issue of Sh.3.20 per share. This dividend is expected to grow at the rate of 15% per annum for 2 years and then drop to12% per annum for the next 3 years. Thereafter, the dividend will grow at 6% per annum indefinitely. The required rate of return is 11%.

Required:

The intrinsic value of the share. (6 marks)

(Total: 20 marks)

QUESTION TWO

(a) The existing capital structure of Mwarakaya Limited is given as follows:

	Sh. "000"
Ordinary share capital (Sh.100 par value)	40,000
Reserves	15,000
12% debentures (Sh.100 par value)	25,000
10% preference share capital (Sh.20 par value)	20,000
	100,000

Additional information:

1. Ordinary shares of Mwarakaya Limited are currently selling at Sh.80 each.
2. The 12% debentures and 10% preference shares are currently selling at Sh.90 and Sh.30 respectively.
3. The most recent ordinary dividend paid by the company is Sh.2.00. This is expected to grow at the rate of 10% each year in perpetuity.
4. The corporate tax rate is 30%.

Required:

The weighted average cost of capital (WACC). (6 marks)

(b) The following i[illegible]ormation relates to the dividend per share (DPS) for Zomollo Ltd.:

Earnings per share (EPS) for year 2016	Sh.6.00
Dividend per share (DPS) for year 2015	Sh.2.40
Target payout ratio	0.60
Adjustment rate	0.70

Required:
Using the Lintner model, predict the dividend per share for the year ended 31 December 2016. (3 marks)

(c) James Chiwende is considering the purchase of a 4-year Sh.1,200,000 par value bond. The bond has a coupon interest rate of 10% per annum.

The investor's required rate of return is 8%.

Required:
The current value of the bond. (3 marks)

(d) Mwatata Ltd. currently operates with terms of net 80 days. The firm's average investment in accounts receivable amount to Sh.4,400,000 per annum. Eighty per cent of the firm's sales are always on credit. The company is considering introducing terms of 2/20 net 90 days.

The relaxation of terms of sale will increase the firm's total sales by 60%. All cash customers and 40% of the credit customers will take advantage of the cash discount. The average collection period will increase to 80 days up from the current average collection period of 72 days. Bad debts are expected to remain at 3% of credit sales.

Inventory levels are estimated to be 5% of the firm's turnover and creditors will increase by Sh.1,000,000.

Gross margin on sales is 40%. The cost of capital is 16%. Corporate tax rate is 30%.

Assume 360 days in a year.

Required:
Advise the management of Mwatata Ltd. on whether to switch to the new credit policy. (8 marks)
(Total: 20 marks)

QUESTION THREE

(a) The following data was extracted from the financial statements of Jaribuni Limited for the year ended 31 December 2015:

	Sh. "millions"
Cash and cash equivalents	200
Fixed assets	567
Sales (credit)	2,000
Net income	100
Current liabilities	211
Notes payable to bank	40
Current ratio	3:1
Debtors collection period	40.55 days
Return on equity	12%

Assume 365 days in a year.

Required:

(i) Accounts receivable. (2 marks)

(ii) Current assets. (2 marks)

(iii) Return on total assets. (2 marks)

(iv) Equity. (2 marks)

(v) Quick ratio. (2 marks)

(b) Manjewa Limited maintains a minimum cash balance of Sh.2,000,000. The standard deviation of its daily net cash flow is estimated at Sh.22,000. The transaction cost of buying and selling of marketable securities is Sh.60 per transaction. The rate of interest for the marketable securities is 5% per annum.

Assume 365 days in a year.

Required:
Using the Miller-Orr cash management model, determine:

(i) The spread. (5 marks)

(ii) The upper cash limit. (2 marks)

(iii) The return point. (3 marks)
(Total: 20 marks)

QUESTION FOUR

(a) Highlight four shortcomings of financial deepening. (4 marks)

(b) (i) Define the term "franchising". (2 marks)

(ii) Suggest four reasons why franchising could be considered as an alternative source of finance to a company. (4 marks)

(c) Ngoba Ltd. has just paid an annual dividend of Sh.38 per share. The management of the company has a target to increase the market share value to Sh.800 per share by considering appropriate investment policies.
Shareholders expect a return on investment of 12%.

Required:
The annual expected growth rate. (5 marks)

(d) Laika Ltd. has identified five investment projects with the following details:

Investment project	Initial outlay (Sh. "millions")	Net present value of investment (Sh. "millions")
A	120	24.0
B	160	43.2
C	100	17.0
D	90	21.6
E	110	19.8

Additional information:
1. None of the investment projects could be delayed.
2. Amount available for investment is limited to Sh.300 million, therefore, the company cannot undertake all the investment projects.
3. All the five projects are divisible.

Required:
Advise the management of Laika Ltd. on the most appropriate investment projects to undertake. (5 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Discuss four principles of Islamic financing. (8 marks)

(b) Highlight four factors that could be taken into account when making dividend decisions. (4 marks)

(c) (i) The agency problem could be resolved using goal congruence.

Explain the term "goal congruence". (2 marks)

(ii) One of the ways creditors could protect themselves against the inherent risk that might arise from agency conflict is through adopting restrictive covenants.

With reference to the above statement, describe three restrictive covenants in a debt contract. (6 marks)
(Total: 20 marks)

....

Present Value of 1 Received at the End of n Periods:

$$PVIF_{r,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	5739	.5407
3	.9706	.9423	.9151	8890	.8638	.8396	.8163	.7938	7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001	*	*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1-\frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

KASNEB

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

WEDNESDAY: 25 November 2015. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) Highlight three financial instruments that are traded in money markets. (3 marks)

(b) Explain the following theories in relation to valuation of financial assets:

(i) Fundamental theory. (3 marks)

(ii) Random walk theory. (3 marks)

(c) Ngatata Limited has issued a 20-year bond with a nominal value of Sh.1,000 and a coupon annual rate of 9%. Coupon payments are made semi-annually in arrears. The yield to maturity of the bond is 12% per annum.

Required:

(i) The value of the bond. (3 marks)

(ii) The new value of the bond, if yield to maturity goes down to 8% per annum. (2 marks)

(d) Rematex Limited's earnings have been growing at the rate of 18% per annum. This growth is expected to continue for 4 years, after which the growth rate will fall to 12% per annum for another 4 years.

Thereafter, the growth rate is expected to be 6% in perpetuity. The company's last dividend paid was Sh.2. The investors' required rate of return on the company's equity is 15%.

Required:

The intrinsic value of the share. (6 marks)

(Total: 20 marks)

QUESTION TWO

(a) Summarise four advantages of debentures over preference shares. (4 marks)

(b) Wendy Limited has the following capital structure:

Debt	35%
Equity	50%
Preference shares	15%

The management of the company has provided the data below:

Bond yield to maturity	9%
Corporate tax rate	30%
Growth rate of ordinary dividends	9%
Market price of one ordinary share	Sh.30
Dividend for one ordinary share	Sh.1.20
Market price of one preference share	Sh.100
Floatation cost of one preference share	Sh.2.00
Dividend for one preference share	Sh.8.50

Required:

The company's weighted average cost of capital (WACC). (6 marks)

(c) Cindy Ltd. currently gives credit terms of net 30 days. The company's average annual sales amount to Sh.120 million. The average collection period is 45 days. The management intends to increase the credit period to net 60 days. This plan is expected to increase sales by 15 per cent. After the change in credit terms, the average collection period is expected to be 75 days. Variable costs are 80% of sales. The company's required rate of return on receivables is 20%.

Corporate tax rate is 30%.

Assume a 360 days year.

Required:
Advise the management of Cindy Ltd. on whether to relax its credit terms. (6 marks)

(d) The following data was extracted from the financial statements of Kapecha Limited as at 30 September 2015:

	Sh."million"
10% preference shares (Sh.10 par value)	16
Ordinary shares (Sh.10 par value)	16
	32
Retained earnings	28
	60
15% debentures	48
	108

The company's net profit before interest was Sh.80 million. The company's dividend pay-out ratio was 50%. Corporate tax rate is 30%.

Required:
Dividend per share (DPS). (4 marks)

(Total: 20 marks)

QUESTION THREE

(a) The following information relates to Mongwe Limited for the year ended 31 October 2015:

Earnings yield	25%
Dividend for the year	10% of share nominal value
Nominal value per share	Sh.40
Market price per share	Sh.150

Required:

(i) Earnings per share (EPS). (2 marks)

(ii) Dividend cover. (2 marks)

(iii) Price-earnings (P/E) ratio. (2 marks)

(b) The following details relate to a capital project in XYZ Limited:

Project cost	Sh.65,000,000
Annual cash flows (after tax)	Sh.21,000,000
Project economic life	5 years
Required rate of return	12%

Required:
Assess the suitability of the capital project using the following methods:

(i) Internal rate of return (IRR). (5 marks)

(ii) Profitability index (PI). (3 marks)

(c) Nile group of hotels is considering the acquisition of Victoria hotel at a cost of Sh.200 million. The group of hotels' cost of capital is currently 16% due to its high gearing level. Victoria hotel has no debt.

As a result of this acquisition, the cost of capital for Nile group of hotels will drop to 12%. Total cash flows will also increase by Sh.25 million per annum in perpetuity.

Required:

(i) Using the net present value (NPV) approach, advise the management of Nile group of hotels on the acquisition of Victoria hotel. (3 marks)

(ii) If the acquisition was funded by borrowing so that there is no impact on gearing after acquisition and the cost of capital was not reduced, advise the management of Nile group of hotels whether to proceed with the acquisition of Victoria hotel. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Fila Ltd. intends to raise finance as follows:

Debenture: Raise Sh.100 million through a debenture issue. Each debenture will have a face value of Sh.1,000 and will be issued at 2% floatation cost and a discount of Sh.60. The coupon rate will be 10% with a maturity period of 10 years.

Equity: The firm will raise Sh.100 million from ordinary shares. The current level of dividend is Sh.5 per share and this has been growing at 10% per annum. The current market price per share is Sh.40 and floatation cost will be 5% of the market price.

Long term debt: Raise Sh.20 million long-term debt at par with an interest rate of 10% per annum.

Corporate tax rate is 30%.

Required:

The marginal cost of capital (MCC) of Fila Ltd. (8 marks)

(b) The following information was extracted from the financial statements of Tana Enterprises Ltd. for the year ended 31 December 2013 and 31 December 2014:

Statement of financial position

	2014 Sh."million"	**2013** Sh."million"
Assets:		
Non-current assets	1,850	1,650
Depreciation	(350)	(225)
Net non-current assets	1,500	1,425
Intangible assets	150	150
Current assets:		
Inventory	330	230
Accounts receivable	220	170
Cash	100	90
Total current assets	650	490
Total assets	2,300	2,065
Equity and liabilities:		
Ordinary share capital (Sh.2 par value 100 million shares issued)	200	200
Additional paid in ordinary share capital	325	325
Retained earnings	550	470
Ordinary shareholders' equity	1,075	995
Preference share capital (10%, Sh.100 par value)	150	150
Long-term liabilities:		
Long-term debt	625	540
Deferred tax	100	80
Total long-term liabilities	725	620

	Sh."million"	Sh."million"
Current liabilities:		
Accounts payable	85	105
Accruals	65	85
Current portion of long-term debt	75	-
Short-term bank notes	125	110
Total current liabilities	350	300
Total equity and liabilities	2,300	2,065

Statement of comprehensive income

	2014 Sh."million"	2013 Sh."million"
Net sales	3,500	2,990
Cost of goods sold	2,135	1,823
Selling, general and administrative expenses	1,107	974
Operating profit	258	193
Net interest expense	74	64
Income from operations	184	129
Income taxes	55	38
Net income	129	91
Preference dividends	15	15
Net income available for ordinary shareholders	114	76
Dividends declared	40	30

Assume that a year has 365 days.

Required:
Compute and interpret the following ratios for the year ended 31 December 2014:

(i) Cash conversion cycle. (6 marks)

(ii) Equity turnover. (2 marks)

(iii) Fixed charge cover. (2 marks)

(iv) Return on capital. (2 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Distinguish between "required rate of return" and "expected rate of return". (4 marks)

(b) Discuss three contracts that are made through Islamic financial instruments. (6 marks)

(c) Summarise six benefits of the integrated financial management information system (IFMIS). (6 marks)

(d) Makata Limited intends to invest its surplus funds in shares with the following return expectations:

Economic condition	Probability	Share returns
Boom	0.20	40%
Average	0.60	15%
Recession	0.20	-10%

Required:
Using the coefficient of variation, assess the risk level associated with the investment. (4 marks)

(Total: 20 marks)

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Present Value of 1 Received at the End of n Periods:

$$PVIF_{r\,n} = 1/(1+r)^n = (1+r)^{-n}$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%	36%
1	.9901	.9804	.9709	.9615	.9524	.9434	.9346	.9259	.9174	.9091	.8929	8772	.8696	.8621	.8475	.8333	.8065	.7813	.7576	.7353
2	.9803	.9612	.9426	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7695	.7561	.7432	.7182	.6944	.6504	.6104	.5739	.5407
3	.9706	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7722	.7513	.7118	.6750	.6575	.6407	.6086	.5787	.5245	.4768	.4348	.3975
4	.9610	.9238	.8885	.8548	.8227	.7921	.7629	.7350	.7084	.6830	.6355	.5921	.5718	.5523	.5158	.4823	.4230	.3725	.3294	.2923
5	.9515	.9057	.8626	.8219	.7835	.7473	.7130	.6806	.6499	.6209	.5674	.5194	.4972	.4761	.4371	.4019	.3411	.2910	.2495	.2149
6	.9420	.8880	.8375	.7903	.7462	.7050	.6663	.6302	.5963	.5645	.5066	.4556	.4323	.4104	.3704	.3349	.2751	.2274	.1890	.1580
7	.9327	.8706	.8131	.7599	.7107	.6651	.6227	.5835	.5470	.5132	.4523	.3996	.3759	.3538	.3139	.2791	.2218	.1776	.1432	.1162
8	.9235	.8535	.7894	.7307	.6768	.6274	.5820	.5403	.5019	.4665	.4039	.3506	.3269	.3050	.2660	.2326	.1789	.1388	.1085	.0854
9	.9143	.8368	.7664	.7026	.6446	.5919	.5439	.5002	.4604	.4241	.3606	.3075	.2843	.2630	.2255	.1938	.1443	.1084	.0822	.0628
10	.9053	.8203	.7441	.6756	.6139	.5584	.5083	.4632	.4224	.3855	.3220	.2697	.2472	.2267	.1911	.1615	.1164	.0847	.0623	.0462
11	.8963	.8043	.7224	.6496	.5847	.5268	.4751	.4289	.3875	.3505	.2875	.2366	.2149	.1954	.1619	.1346	.0938	.0662	.0472	.0340
12	.8874	.7885	.7014	.6246	.5568	.4970	.4440	.3971	.3555	.3186	.2567	.2076	.1869	1685	.1372	.1122	.0757	.0517	.0357	.0250
13	.8787	.7730	.6810	.6006	.5303	.4688	.4150	.3677	.3262	.2897	.2292	.1821	.1625	.1452	.1163	.0935	.0610	.0404	.0271	.0184
14	.8700	.7579	.6611	.5775	.5051	.4423	.3878	.3405	.2992	.2633	.2046	.1597	.1413	.1252	.0985	.0779	.0492	.0316	.0205	.0135
15	.8613	.7430	.6419	.5553	.4810	.4173	.3624	3152	.2745	.2394	.1827	.1401	.1229	.1079	.0835	.0649	.0397	.0247	.0155	.0099
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	.1069	.0930	.0708	.0541	.0320	.0193	.0118	.0073
17	.8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	.0054
18	.8360	.7002	.5874	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	.0691	.0508	.0376	.0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.0313	.0168	.0092	.0051	.0029
20	.8195	.6730	.5537	.4564	.3769	.3118	.2584	.2145	.1784	.1486	1037	.0728	.0611	.0514	.0365	.0261	.0135	.0072	.0039	.0021
25	.7798	.6095	.4776	.3751	.2953	.2330	.1842	.1460	.1160	.0923	.0588	.0378	.0304	.0245	.0160	.0105	.0046	.0021	.0010	.0005
30	.7419	.5521	.4120	.3083	.2314	.1741	.1314	.0994	.0754	.0573	.0334	.0196	.0151	.0116	.0070	.0042	.0016	.0006	.0002	.0001
40	.6717	.4529	.3066	.2083	.1420	.0972	.0668	0460	.0318	.0221	.0107	.0053	.0037	.0026	.0013	.0007	.0002	.0001		*
50	.6080	.3715	.2281	.1407	.0872	.0543	.0339	.0213	.0134	.0085	.0035	.0014	.0009	.0006	.0003	.0001	*	*	*	*
60	.5504	.3048	.1697	.0951	.0535	.0303	.0173	.0099	.0057	.0033	.0011	.0004	.0002	.0001	*	*	*	*	*	*

* The factor is zero to four decimal places

Present Value of an Annuity of 1 Per Period for n Periods:

$$PVIF_{r\,t} = \sum_{t=1}^{n} \frac{1}{(1+r)^t} = \frac{1 - \frac{1}{(1+r)^n}}{r}$$

Number of payments	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	28%	32%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8696	0.8621	0.8475	0.8333	0.8065	0.7813	0.7576
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6257	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2832	2.2459	2.1743	2.1065	1.9813	1.8684	1.7663
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.8550	2.7982	2.6901	2.5887	2.4043	2.2410	2.0957
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.3522	3.2743	3.1272	2.9906	2.7454	2.5320	2.3452
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	5.0188	4.8332	4.4941	4.1925	3.6819	3.2689	2.9304
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3351	2.9776
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3868	3.0133
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.5831	5.3423	4.9095	4.5327	3.9124	3.4272	3.0404
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.9542	5.6685	5.1624	4.7296	4.0333	3.5026	3.0882
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.2497	6.4674	6.1280	5.8178	5.2732	4.8122	4.0799	3.5294	3.1039
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.3658	6.5504	6.1982	5.8775	5.3162	4.8435	4.0967	3.5386	3.1090
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4694	6.6231	6.2593	5.9288	5.3527	4.8696	4.1103	3.5458	3.1129
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	7.8431	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.0552	7.0027	6.5660	6.1772	5.5168	4.9789	4.1601	3.5693	3.1242
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.2438	7.1050	6.6418	6.2335	5.5482	4.9966	4.1659	3.5712	3.1250
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	8.3045	7.1327	6.6605	6.2463	5.5541	4.9995	4.1666	3.5714	3.1250
60	44.9550	34.7609	27.6756	22.6235	18.9293	16.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6651	6.2402	5.5553	4.9999	4.1667	3.5714	3.1250

KASNEB

CPA PART II SECTION 3

CS PART II SECTION 3

CCP PART II SECTION 3

FINANCIAL MANAGEMENT

PILOT PAPER

September 2015. **Time Allowed: 3 hours.**

Answer ALL questions. Marks allocated to each question are shown at the end of the question. Show ALL your workings.

QUESTION ONE

(a) "Provision for depreciation is an internally generated source of finance to a company".

Explain the basis upon which provision for depreciation is a source of finance to an organisation. (4 marks)

(b) MM Company Ltd. is contemplating raising additional finance for an expansion programme. The company is considering Sh.50 million for this expansion programme. The company's existing capital structure is given below:

	Sh."000"
Ordinary share capital (Sh.20 par)	60,000
10% debenture capital	25,000
12% preference share capital	15,000
Reserves	50,000
	150,000

Two alternative financing options available to the company are given as follows:

Option 1
Issue new ordinary shares at par to raise all the desired funds.

Option II
Issue new ordinary shares at par to raise Sh.30 million and the balance will be raised through the issue of 15% debentures.

The management are optimistic that this investment will enable the company to generate annual operating profit (EBIT) whose forecasted values in different states of nature and their probability of occurrence are given as follows:

State of Nature	Probability	Operating profit (EBIT)
Good	0.4	20,000
Moderate	0.25	15,000
Poor	0.35	10,000

The firm pays corporation tax at the rate of 30%.

Required:

(i) Determine the level of expected operating profit (EBIT) and expected earnings per share at the point of indifference between the firm's earning under financing options I and II. (6 marks)

(ii) Determine the range of expected operating profit within which each financing option will be recommended (Hint: a graph may be used to answer this question). (6 marks)

(c) With reference to (b) above, indicate the financing option you would recommend assuming that the company's expected operating profits are:

(i) As forecasted by the organisation. (1 mark)

(ii) Sh.6,000,000 per annum. (1 mark)

(iii) Sh.15,000,000 per annum. (2 marks)

(Total: 20 marks)

QUESTION TWO

(a) In relation to financing of firm's activities, distinguish between the term "capital structure" and financial structure". (3 marks)

(b) The management of Swara Ltd. is considering replacing an existing machine which was bought 3 years ago at a cost of Sh.20 million. The machine was expected to have a useful life of 5 years with no resale value at the end of this period. A critical evaluation of this asset shows that the existing machine is usable for another five years at the end of which resale value is estimated at Sh.2 million. The current disposal value of the existing machine is estimated at Sh.10 million.

The new machine is not locally available. The management expect to import this machine at a cost of Sh.40 million. Installation cost of this machine is estimated at Sh.500,000.

Import duty payable and freight charges are estimated at Sh.300,00 and Sh.200,000 respectively. This machine is expected to have a useful life of five years, at the end of which resale value is estimated at Sh.5 million.

This investment is expected to lead to increased sales. To support increase in sales, the firm will require an extra investment in working capital at the beginning of the new machine's useful life. Inventory balance is expected to increase by Sh.800,000, debtors balance will increase by Sh.700,000 and creditors balance will increase by Sh.1,000,000.

However, the firm will require an extra investment in working capital at the end of the second year of Sh.250.000. The total investment in working capital will be recovered at the end of the machine's useful life.

The earnings before depreciation and tax to be generated by each asset during each year are given as follows:

	Earning before depreciation and tax (EBDT)	
Year	**New machine Sh."000"**	**Existing machine Sh."000"**
1	70,000	50,000
2	75,000	55,000
3	85,000	60,000
4	80,000	55.000
5	70,000	65.000

Additional information:

1. The new machine shall require an overhaul at the end of third year. The overhaul cost is estimated at Sh.2 million. The cost will be amortised separately on a straight line basis.
2. The firm provides for depreciation on all their non-current assets on a straight line basis.
3. The firm pays corporation tax at the rate of 30%.
4. The firm's capital structure which is optimal comprises of 70% equity and 30% debt. The cost of equity is 10% and before tax cost of debt is 8%.

Required:

Using the net present value technique, advise on whether the firm should replace the existing machine. (15 marks)

(c) State two limitations of the net present value method. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Briefly explain how Islamic finance differs from conventional finance. (6 marks)

(b) Ruiru Tanners Ltd. has a total of Sh.100 million invested in net assets as at the end of December 2014. The firm intends to increase its production capacity during the year 2015 by Sh.100 million. The company utilises debt, preferred stock and equity capital within its capital structure. Several alternative financing arrangements are available, namely;

- The company can issue 9% debentures with a par value of Sh.100 each at an issue price of Sh.90 each (market price). Maximum amount available is Sh.20,000,000. Any extra debt finance will be raised through the issue of 12% debentures at Sh.960 each. The par value of this debenture is Sh.1,000 each.
- The company can issue additional 15% preference shares with a par-value of Sh.50 at Sh.75 each.
- The company can issue new ordinary shares at the current market price of Sh.88 per share. Floatation cost equal to Sh.8 per share sold. The company's ordinary shareholders have consistently enjoyed a dividend whose annual growth rate on average has been 10% and this is expected to continue into the foreseeable future. The company's earning per share this year is Sh.10 and adopts a constant dividend payout ratio of 40% each year.
- The company can generate Sh.10 million from the internal sources to finance this expansion programme.

Additional information:

1. The company pays corporation tax at the rate of 30%.
2. The firm's existing capital structure which is considered to be optimal is given below:

	Sh."000"	Sh. "000"
Debt capital:		
6% debenture capital	10,000	
8% term loan	20,000	30,000
Preference shares (Sh.50 par value)		30,000
Ordinary shares (Sh.5 par value)	15,000	
Retained earnings	25,000	40,000
		100,000

Required:

(i) The amount of funds to be raised from each source during the year 2015 so as to maintain the firm's existing optimal capital structure. (3 marks)

(ii) The number of ordinary shares to be issued to raise desired external equity. (2 marks)

(iii) The levels of financing at which marginal cost of capital changes (Hint: break points in weighted marginal cost of capital curve). (2 marks)

(iv) The firm's weighted marginal cost of capital if it were to raise only Sh.20 million. (3 marks)

(v) The firm's weighted marginal cost of capital for the funds to be raised during the year 2015 for the three levels of financing. (4 marks)

(Total: 20 marks)

QUESTION FOUR

(a) A Ltd. is considering taking over B Ltd. The forecasted annual net operating cash flows to be generated by the target firm are given as follows:

Year	Net cash flow (NCF) Sh."million"
1	5
2	8
3 – 7	10
8 – 10	15
11 – α	12

The firm's minimum required rate of return is 5% above the risk free rate of return. The risk free rate of return 15%.

Required:

The maximum price payable by A Ltd. to acquire B Ltd. (6 marks)

(b) Shafana Ltd. currently operates with terms of net 72 days. The firm's average investment in accounts receivable is Sh.2,400,000 per year. Eighty percent of the firm's sales are always on credit. The company is considering introducing terms of 2/20 net 90 days.

The firm's total sales per annum will increase by 50%. All cash customers and 40% of credit customers will take advantage of the cash discount.

Average collection period will increase to 80 days. Gross margin on sales is 40% while the cost of capital is 16%.

Required:
Advise the company on whether to switch to the new credit policy (Assume a year has 360 days). (6 marks)

(c) The shares of Bidii Ltd. are currently selling at Sh.60 each at the securities exchange. Bidii Ltd.'s price earning ratio is 6 times. The company adopts a constant 40% payout ratio as its dividend policy. It is predicted that the company's dividends will grow at an annual rate of 20% for the first three years, 15% for the next 2 years and thereafter at a constant rate of 10% per annum in perpetuity. The investor's minimum required rate of return is 12%.

Required:
(i) Current intrinsic value of the shares of Bidii Ltd. (6 marks)

(ii) Advise a prospective investor whether or not to buy shares of Bidii Ltd. (2 marks)
(Total: 20 marks)

QUESTION FIVE
(a) The most recent statement of financial position for Upendo Ltd. is presented below:

Upendo Ltd.
Statement of financial position
As at 30th November 2014

	Sh. "000"		Sh."000"
Inventory	2,000	Trade creditors	2,200
Debtors	3,000	Accrued expenses	2,200
Cash at bank	3,800	Long-term debt	8,800
Fixed assets (NBV)	13,200	Ordinary shares	2,200
		Retained profit	6,600
	22,000		22,000

The company is about to embark on an advertising campaign which is expected to raise sales from their present level of Sh.27.5 million to Sh.38.5 million by the end of the next financial year ended 30 November 2015.

The firm is presently operating at full capacity and therefore will have to increase its investment in both current and fixed assets to support the projected level of sales. It is estimated that both categories of assets will rise in direct proportion to the projected increase in sales.

For the year just ended, the firm's after tax profit margin was 6% but is expected to rise to 7% of projected sales. The firm adopts a stable predictable dividend policy. The ordinary dividend payable for the year ended 30 November 2015 is expected to increase by 10% from the last year's dividend of Sh.1 million.

Upendo Ltd's trade creditors and accrued expenses are expected to vary directly with sales. In addition, long term debt financing will be used to finance next year's operations that are not forthcoming from other sources.

Required:
(i) Estimate the amount of additional funds to be raised through long term debt financing. (4 marks)

(ii) Prepare a forecast statement of financial position as at 30 November 2015. (6 marks)

(iii) Using the results obtained in (a) (i) and (ii) above, compute and interpret the following financial ratios for the year ended 30 November 2015:

(a) Return on equity. (2 marks)
(b) Total assets turnover. (2 marks)
(c) Capital gearing ratio. (2 marks)

(b) (i) Define the term financial innovation. (1 mark)

(ii) Highlight any three factors responsible for financial innovation. (3 marks)
(Total: 20 marks)

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