

# 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
	<u>50,000</u>

### Additional information:

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

- All employees are paid in the month in which the wage or salary is earned.
- Rent of Sh.10 million for each quarter is paid in March, June, September and December.
- Other cash overheads of Sh.2 million per month are payable.
- A new plant due for delivery in September will be paid in November at a cost of Sh.25 million.
- 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
<b>Current assets:</b>				
Inventory	40,145		50,455	
Accounts receivable	40,210		43,370	
Cash at bank	<u>12,092</u>		<u>5,790</u>	
		<u>92,447</u>		<u>99,615</u>
Total assets		97,442		112,315
<b>Current liabilities:</b>				
Accounts payable	34,389		39,215	
Taxation	<u>2,473</u>		<u>3,260</u>	
	36,862		42,475	
<b>Long-term liabilities:</b>				
10% loan notes	<u>19,840</u>		<u>19,480</u>	
Total liabilities		(56,702)		(62,315)
Net assets		<u>40,740</u>		<u>50,000</u>
<b>Equity:</b>				
Called-up share capital Sh.0.25 per share		9,920		9,920
Retained earnings		<u>30,820</u>		<u>40,080</u>
Shareholders' funds		<u>40,740</u>		<u>50,000</u>

**Bokasa Limited income statement for the year ended 31 December:**

	2015	2016
	Sh."000"	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	<u>(5,734)</u>	<u>(7,026)</u>
Profit for the year	<u>9,520</u>	<u>11,660</u>

	31 December 2015	31 December 2016
	Sh."000"	Sh."000"
<b>Notes:</b>		
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%	26%	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	.9420	.9246	.9070	.8900	.8734	.8573	.8417	.8264	.7972	.7650	.7501	.7352	.7182	.6944	.6504	.6104	.5735	.5407
3	.9704	.9423	.9151	.8890	.8638	.8396	.8163	.7938	.7727	.7513	.7118	.6750	.6575	.6407	.6006	.5707	.5245	.4768	.4348	.3975
4	.9610	.9248	.8985	.8748	.8527	.8327	.8143	.7979	.7830	.7684	.7209	.6800	.6585	.6421	.5958	.5623	.5130	.4623	.4194	.3823
5	.9515	.9057	.8806	.8589	.8389	.8208	.8043	.7894	.7759	.7636	.7089	.6640	.6415	.6251	.5749	.5385	.4859	.4411	.3965	.3595
6	.9420	.8880	.8649	.8446	.8263	.8099	.7954	.7826	.7711	.7606	.7000	.6516	.6281	.6117	.5584	.5200	.4654	.4197	.3745	.3375
7	.9327	.8706	.8491	.8307	.8143	.7999	.7868	.7754	.7656	.7568	.6900	.6382	.6147	.5983	.5429	.5026	.4464	.4000	.3542	.3173
8	.9235	.8535	.8339	.8175	.8031	.7900	.7787	.7692	.7611	.7539	.6820	.6270	.6035	.5871	.5297	.4866	.4290	.3822	.3361	.2992
9	.9143	.8368	.8181	.8037	.7915	.7802	.7719	.7646	.7582	.7527	.6760	.6180	.5945	.5781	.5197	.4747	.4168	.3700	.3240	.2871
10	.9053	.8203	.8034	.7909	.7806	.7713	.7650	.7596	.7550	.7511	.6690	.6090	.5855	.5691	.5100	.4631	.4051	.3584	.3125	.2756
11	.8963	.8043	.7893	.7786	.7702	.7628	.7574	.7530	.7499	.7476	.6610	.6000	.5765	.5601	.5010	.4531	.3951	.3484	.3025	.2656
12	.8874	.7885	.7754	.7666	.7601	.7547	.7503	.7472	.7450	.7436	.6530	.5890	.5655	.5491	.4900	.4421	.3841	.3374	.2915	.2546
13	.8787	.7730	.7619	.7550	.7505	.7461	.7429	.7407	.7393	.7388	.6450	.5790	.5555	.5391	.4800	.4321	.3741	.3274	.2815	.2446
14	.8700	.7579	.7487	.7439	.7404	.7372	.7350	.7336	.7331	.7336	.6360	.5680	.5445	.5281	.4690	.4211	.3631	.3164	.2705	.2336
15	.8613	.7430	.7357	.7328	.7304	.7282	.7269	.7264	.7269	.7284	.6270	.5570	.5335	.5171	.4580	.4101	.3521	.3054	.2595	.2226
16	.8528	.7284	.7331	.7319	.7305	.7292	.7287	.7292	.7307	.7332	.6280	.5550	.5315	.5151	.4560	.4081	.3501	.3034	.2575	.2206
17	.8444	.7142	.7309	.7316	.7311	.7306	.7301	.7306	.7331	.7366	.6290	.5540	.5305	.5141	.4550	.4071	.3491	.3024	.2565	.2196
18	.8360	.7002	.7299	.7324	.7329	.7334	.7339	.7344	.7369	.7414	.6300	.5530	.5295	.5131	.4540	.4061	.3481	.3014	.2555	.2186
19	.8277	.6864	.7299	.7344	.7359	.7374	.7389	.7404	.7439	.7494	.6350	.5560	.5325	.5161	.4570	.4091	.3511	.3044	.2585	.2216
20	.8195	.6730	.7307	.7372	.7397	.7422	.7447	.7472	.7517	.7582	.6400	.5590	.5355	.5191	.4600	.4121	.3541	.3074	.2615	.2246
25	.7798	.6095	.7354	.7465	.7500	.7535	.7570	.7605	.7650	.7715	.6500	.5650	.5415	.5251	.4660	.4181	.3601	.3134	.2675	.2306
30	.7419	.5521	.7351	.7483	.7538	.7593	.7648	.7703	.7758	.7823	.6600	.5700	.5465	.5301	.4710	.4231	.3651	.3184	.2725	.2356
40	.6717	.4529	.7368	.7530	.7615	.7700	.7785	.7870	.7955	.8040	.6800	.5850	.5615	.5451	.4860	.4381	.3801	.3334	.2875	.2506
50	.6090	.3715	.7391	.7582	.7697	.7822	.7957	.8092	.8227	.8362	.7100	.6100	.5865	.5701	.5110	.4631	.4051	.3584	.3125	.2756
60	.5504	.3048	.7417	.7637	.7782	.7937	.8102	.8277	.8462	.8647	.7300	.6250	.6015	.5851	.5260	.4781	.4201	.3734	.3275	.2906

\* The factor is zero to four decimal places.

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

$$PVIFA_{r,n} = \sum_{t=1}^n \frac{1}{(1+r)^t} = \frac{1}{r} \left[ 1 - \frac{1}{(1+r)^n} \right]$$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	15%	16%	18%	20%	24%	26%	32%	36%
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	0.7353
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7353	1.6901	1.6467	1.6237	1.6052	1.5656	1.5278	1.4568	1.3916	1.3315	1.2763
3	2.9410	2.8839	2.8296	2.7781	2.7292	2.6830	2.6394	2.5971	2.5561	2.4969	2.4019	2.3214	2.2832	2.2485	2.1743	2.1065	1.9813	1.8684	1.7663	1.6743
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	2.7907	2.6901	2.5927	2.4044	2.2410	2.0957	1.9607
5	4.8534	4.7135	4.5797	4.4510	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6040	3.4331	3.3522	3.2743	3.1272	2.9906	2.7494	2.5320	2.3452	2.1802
6	5.7983	5.6014	5.4172	5.2421	5.0757	4.9173	4.7663	4.6229	4.4859	4.3553	4.1114	3.8887	3.7845	3.6847	3.4976	3.3255	3.0205	2.7594	2.5342	2.3392
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3903	5.2064	5.0330	4.8684	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775	2.4525
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5349	5.3349	4.9676	4.6389	4.4873	4.3436	4.0778	3.8372	3.4212	3.0759	2.7800	2.5150
9	8.5660	8.1622	7.7861	7.4353	7.1079	6.8017	6.5152	6.2469	5.9952	5.7500	5.3282	4.9464	4.7716	4.6065	4.3000	4.0310	3.5655	3.1842	2.8681	2.5731
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2181	5.0180	4.8332	4.4941	4.1925	3.6819	3.2859	2.9304	2.6054
11	10.3676	9.7968	9.2526	8.7605	8.3064	7.8869	7.4987	7.1380	6.8052	6.4951	5.9377	5.4527	5.2337	5.0286	4.6560	4.3271	3.7757	3.3551	2.9776	2.6226
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3820	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.4206	5.1971	4.7932	4.4392	3.8514	3.3808	3.0133	2.6183
13	12.1337	11.3464	10.6350	9.9806	9.3936	8.8527	8.3577	7.9030	7.4859	7.1034	6.4235	5.8424	5.5831	5.3423	4.9029	4.5327	3.9124	3.4272	3.0404	2.6054
14	13.0037	12.1062	11.2961	10.5631	9.8988	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.7245	5.4675	5.0001	4.6106	3.9616	3.4587	3.0609	2.5859
15	13.8651	12.8493	11.9379	11.1894	10.3797	9.7122	9.1079	8.5955	8.0607	7.6061	6.8103	6.1422	5.8474	5.5755	5.0916	4.6755	4.0013	3.4834	3.0764	2.5614
16	14.7179	13.5777	12.5611	11.6523	10.6278	10.1059	9.4466	8.8514	8.3126	7.8237	6.9740	6.2655	5.9547	5.6695	5.1624	4.7296	4.0333	3.5026	3.0802	2.5252
17	15.5623	14.2919	13.1961	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0219	7.1196	6.3729	6.0472	5.7487	5.2223	4.7746	4.0591	3.5177	3.0971	2.5021
18	16.3993	14.9920	13.7535	12.6599	11.6096	10.8278	10.0591	9.3719	8.7596	8.2014	7.2497	6.4674	6.1280	5.8178	5.2752	4.8122	4.0799	3.5294	3.1039	2.4789
19	17.2290	15.6785	14.3238	13.1339	12.0953	11.1501	10.3256	9.6036	8.9501	8.3649	7.3658	6.5504	6.1902	5.8775	5.3162	4.8435	4.0987	3.5386	3.1050	2.4439
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.4654	6.6231	6.2593	5.9298	5.3527	4.8696	4.1103	3.5438	3.1129	2.4189
25	22.0232	15.5235	17.4131	15.6221	14.0939	12.7834	11.6336	10.6748	9.8226	9.0770	7.8421	6.8729	6.4641	6.0971	5.4669	4.9476	4.1474	3.5640	3.1220	2.3370
30	25.8077	22.3965	25.0004	21.2020	15.3725	13.7648	12.4090	11.2579	10.2737	9.4269	8.0552	7.0037	6.5660	6.1772	5.5160	4.9709	4.1601	3.5693	3.1242	2.2920
40	32.8347	27.3555	33.1148	29.7928	21.1591	15.0403	13.3317	11.9246	10.7574	9.7781	8.2438	7.1050	6.6418	6.2335	5.5482	4.9566	4.1659	3.5712	3.1250	2.2500
50	39.1961	31.4236	37.7298	33.4622	20.2559	15.7419	13.8007	12.2325	10.9617	9.9148	8.3045	7.1327	6.6005	6.2463	5.5541	4.9995	4.1686	3.5714	3.1250	2.2500
60	44.9550	34.7609	41.6756	36.8235	18.9299	14.1614	14.0392	12.3766	11.0480	9.9672	8.3240	7.1401	6.6051	6.2402	5.5553	4.9999	4.1687	3.5714	3.1250	2.2500