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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 Sh."000"	2016 Sh."000"	2017 Sh."000"	2018 Sh."000"	2019 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	0.6750	0.6575	0.6407	0.5787	0.5245	0.5120	0.4552
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	0.9040
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