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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

MONDAY: 30 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) Explain the following terms as applied in international finance:

(i) Delphi technique. (2 marks)

(ii) Currency cocktail bond. (2 marks)

(b) Dyna Ltd. is a Kenyan company involved in international business of exporting executive footwear. The company is expecting a receivable of 50,000,000 Tanzania shillings (Tsh.) in 90 days from a sales transaction to Tanzania.

Additional information:

1. Annualised interest rate in Tanzania is 9%.
2. Annualised interest rate in Kenya is 13%.
3. 90-day forward rate in Tanzanian currency is Tsh.10.
4. Spot exchange rate of the Tanzania shilling to Kenya shilling is Tsh.9.50.

Required:

(i) The amount to be received by Dyna Ltd. in Kenya shillings using money market hedge. (3 marks)

(ii) The amount to be received by Dyna Ltd. in Kenya shillings using forward contract hedge. (2 marks)

(iii) Advise Dyna Ltd. on which of the two options under (b) (i) and (b) (ii) above to select. (1 mark)

(c) Savanna Technologies Limited sold computer software to Maxweb Limited, a company based in Rwanda on credit and invoiced 10 million Rwandan Francs (RWF) payable in six months. Currently, the six-month forward exchange rate is 0.1121 KES/RWF and the foreign exchange advisor for Savanna Technologies Limited predicts that the spot rate is likely to be 0.1100 KES/RWF in six months.

Required:

(i) The expected gain/loss from the forward hedging. (2 marks)

(ii) Recommend to the management of Savanna Technologies Limited on whether to hedge the Rwandan Franc (RWF). (1 mark)

(iii) Suppose the forward exchange rate advisor predicts that the future spot rate will be the same as the forward exchange rate quoted today.

Explain whether you would still recommend hedging of the RWF. (1 mark)

(d) Discuss three risk exposures that your country is likely to face from excessive external borrowing. (6 marks)

(Total: 20 marks)

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QUESTION TWO

(a) Tom Lusweti has been engaging in locational arbitrage for some time now. He is considering the following quotation from two different banks located in different locations:

	Lipa Bank		Vuma Bank	
Currency quotes	**Bid**	**Ask**	**Bid**	**Ask**
Euro/US dollar (€/$)	€0.8226	€0.8293	€0.8361	€0.8395

Required:

(i) Assuming that Lusweti is holding 20,000 Euros, demonstrate how he could take advantage of locational arbitrage. (3 marks)

(ii) Highlight two assumptions of locational arbitrage made in (a) (i) above. (2 marks)

(b) Citing four reasons, justify why it is inevitable for multinational corporations to manage political risks. (4 marks)

(c) Examine three major reasons why multinational corporations face challenges in computing cost of capital across countries. (3 marks)

(d) Evaluate four causes of global financial crisis. (8 marks)

(Total: 20 marks)

QUESTION THREE

(a) Zulu Enterprises, a South African company intends to invest in a capital project in Kenya. The project is expected to commence on 1 July 2020.

Additional information:

1. The project is expected to cost South African Rands (ZAR) 75,000,000 and a further ZAR 42,000,000 will be required for working capital requirements on commencement of the project.
2. The working capital requirements on commencement of the project would be recouped at the end of the project's economic life.
3. The economic life of the project is 5 years.
4. Capital allowance would be provided on straight-line basis over the project's economic life with zero salvage value expected.
5. The expected revenue, sales and fixed costs are as follows:

	Year				
	2020	**2021**	**2022**	**2023**	**2024**
Sales (ZAR "000")	130,000	170,000	195,000	210,000	75,000
Fixed costs (ZAR "000")	26,000	40,000	45,000	35,000	30,000

6. Variable costs are expected to be 40% of sales revenue annually.
7. The exchange rates between the South African Rand and the Kenya shilling are expected to be as follows over the project's economic life:

(Assume the exchange rate on 1 January 2020 was Ksh.14.00/ZAR).

31 December 2020	15.20
31 December 2021	17.10
31 December 2022	18.95
31 December 2023	20.50
31 December 2024	22.00

8. Cost of capital in both South African and Kenya is 12% and the rates of taxes are assumed to be the same at 30%.
9. The project would be exempted from tax in South Africa.
10. All cash flows are expected to accrue at the year end.

Required:

(i) The project's Net Present Value (NPV) in Kenya shillings. (10 marks)

(ii) Advise the management whether to invest in the project. (2 marks)

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(b) Explain the application of the following in the context of international finance:

(i) Risk adjusted discounted rate. (2 marks)

(ii) Sensitivity analysis. (2 marks)

(iii) Simulation. (2 marks)

(iv) Tax drag. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Max Limited has its head office located in Nairobi, Kenya and a subsidiary in London, United Kingdom. The subsidiary remits a total of 50,000 Sterling Pound (£) every month to the head office. On average, it takes the subsidiary 15 days to transfer the funds to the head office.

The finance manager of Max Limited has approached HTL Bank to transfer the funds on its behalf. The bank would take 3 days to transfer the funds at a transfer fee of 2% of the amount transferred every month. Max Limited would use the days saved on transfer to invest the funds received.

Additional information:

1. The return on investment is 18% per annum.
2. The exchange rate between Kenya shilling and Sterling pound is Ksh.140/1£.

Assume a year has 360 days.

Required:

Advise the management of Max Limited on whether to use the HTL Bank for the transfer of funds. (6 marks)

(b) Describe three limitations of using fundamental analysis in forecasting trends in exchange rate markets. (3 marks)

(c) Explain five points of considerations when selecting an international payment method. (5 marks)

(d) Citing an example in each case, describe three types of foreign direct investments (FDIs). (6 marks)

(Total: 20 marks)

QUESTION FIVE

(a) With reference to the international tax environment:

(i) Explain the term "foreign tax credit". (2 marks)

(ii) Discuss the concept of transfer pricing. (4 marks)

(iii) Outline three risks of applying transfer pricing. (3 marks)

(b) Zebedi Limited is a Kenyan firm that conducts major importing and exporting business in China. All transactions are invoiced in United States dollars (USD). The company obtained a long term debt in Kenya at an interest rate of 12% per annum. The stock market return in Kenya is expected to be 14% annually. The long term risk free rate in Kenya is 9%.

Zebedi Ltd.'s beta is 1.2. Its target capital structure is 40% debt. Zebedi Limited is subject to a 30% corporate tax rate.

Required:

Estimate the cost of capital to Zebedi Limited. (6 marks)

(c) Describe five ethical issues that multinational corporations have to address in their host countries. (5 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

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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

THURSDAY: 28 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) Explain the following terms as used in international finance:

(i) Floating rate notes (FRNs). (1 mark)

(ii) Forfaiting. (1 mark)

(iii) Crowd funding. (1 mark)

(iv) Green bond. (1 mark)

(b) One of the objective of the East African Community (EAC) bloc is to achieve economic integration among the member states.

In light of the above statement, describe five reasons why EAC is yet to achieve the above objective. (5 marks)

(c) Discuss three criticisms of the Heckscher-Ohlim Theory of international trade. (3 marks)

(d) The following information relates to the Wodu Republic for the financial year ended 31 December 2018:

	W $ "billion"
Exports of merchandise	3,344
Exports of services	1,491
Income receipts	2,454
Imports of merchandise	5,901
Imports of services	1,134
Income payments	2,211
Net transfers by Wodu Republic	336

Required:

(i) A current account for Wodu Republic for the year ended 31 December 2018. (4 marks)

(ii) Propose four measures that Wodu Republic could take to address the balance of payment (BOP) deficit obtained in (d) (i) above. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Explain four reasons why multinational corporations (MNCs) forecast exchange rates. (4 marks)

(b) SPL Limited, a company based in Kenya expects to receive 2 million Euros in one year's time. The existing spot rate of the Euro is KES 120/EUR. The 1-year forward rate of the Euro is KES 121/EUR. The company expects the spot rate of the Euro to be KES 122/EUR in one year.

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There are 1-year put options on Euros available in the market with an exercise price of KES 123 and a premium of KES 4 per unit.

The following money market rates are available:

	Kenya	Eurozone
Deposit rate	8%	5%
Borrowing rate	9%	6%

Required:

(i) The cash flow to be received in Kenya Shillings (KES) assuming SPL Limited uses money market hedge. (3 marks)

(ii) The cash flow to be received in KES assuming SPL Limited decides to use a put option hedge. (2 marks)

(iii) Advise the management on the best strategy to adopt. (1 mark)

(c) Douglas Kombo specialises in cross-rate arbitrage. He notices the following quotes:

Swiss Franc/United States dollar = SFr 1.5971/$
Australian Dollar/United States Dollar = A $ 1.8215/$
Australian Dollar/Swiss Franc = A $ 1.440/SFr

Required:

Arbitrage profit, if any, assuming Douglas has $1,000,000 to invest. (5 marks)

(d) The following interaffiliate cash flows are uncorrelated with one another:

Affiliate	Expected transaction ($)	Standard deviation ($)
United States	100,000	40,000
Canada	150,000	60,000
Zambia	175,000	30,000
Egypt	200,000	70,000

Required:

(i) The standard deviation of the portfolio of cash held in the central depository. (2 marks)

(ii) Outline three advantages of centralised cash management system to the multinational corporations (MNCs) (3 marks)

(Total: 20 marks)

QUESTION THREE

(a) Explain the following methods of payment that could be used by a multinational corporation (MNC) to settle international transactions:

Required:

(i) Prepayment. (2 marks)

(ii) Letters of credit (L/Cs). (2 marks)

(iii) Drafts. (2 marks)

(iv) Open account. (2 marks)

(b) Suggest three measures that a multinational corporation could take to address the issue of nepotism and corruption in the host country. (3 marks)

(c) Evaluate three factors that influence capital structure decisions for multinational corporations (MNCs). (3 marks)

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(d) Tamco Limited, a Kenyan based company, is considering investing in a new project to be based either in Kenya or Rwanda. The project will constitute 30% of the total funds to be invested by the company.

The following information is a forecast of the proposed project over a period of 5-years:

	Characteristics of proposed projects		
	Existing Business	**If located in Kenya**	**If located in Rwanda**
Mean expected annual return on investments (ROI)	20%	25%	25%
Standard deviation of expected annual after-tax ROI	0.10	0.09	0.11
Correlation of expected annual after-tax ROI for similar business in Kenya	-	0.80	0.02

Required:

(i) The overall expected after-tax returns assuming that the new project is located in Kenya. (2 marks)

(ii) The overall variance in returns assuming Tamco Limited decides to locate the new project in Kenya. (2 marks)

(iii) The overall variability of the company's return assuming the project is located in Rwanda. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) In a liberalised economy, market forces of demand and supply dictate the interest rates and exchange rates in the market.

With reference to the above statement, analyse two justifications why governments intervene in the exchange rate system. (2 marks)

(b) In an attempt to address the grave concern of illicit financial flows and the emerging risks of counterfeit, your country recently undertook an exercise known as "demonetisation" of the currency.

Required:

(i) Explain the term "demonetisation". (1 mark)

(ii) Argue two cases in favour of demonetisation and two cases against demonetisation. (4 marks)

(c) (i) Using relevant examples, distinguish between "macro political risk" and "micro political risk". (2 marks)

(ii) Suggest two techniques that a multinational corporation could adopt to minimise its exposure to political risks. (2 marks)

(d) It has been established that the United States Dollars (USD) exhibits a 6-month interest rate of 10% per annum while the Kenyan Shilling (KES) exhibits a 6-month interest rate of 15% per annum.

Required:

(i) The forward rate premium or discount of the USD with respect to Kenyan Shilling (KES) according to interest rate parity. (2 marks)

(ii) The 6-month forward rate of the USD with respect to the KES assuming that the current spot rate of the USD is KES 100. (2 marks)

(iii) A Kenyan investor intends to invest KES 30,000,000 in the United States for 6-months.

Compute the gain or loss from interest rate covered arbitrage approach. (5 marks)

(Total: 20 marks)

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QUESTION FIVE

(a) Discuss four benefits that would accrue to a foreign investor investing in the international bonds and equity markets. (4 marks)

(b) Highlight four conditions that must be met by a subsidiary before it could be considered as a tax haven. (4 marks)

(c) Examine four strategies that a multinational corporation could use to hedge its economic exposure. (4 marks)

(d) (i) Explain the meaning of the term "tax drag". (2 marks)

(ii) The following information relates to Country A and Country B:

	A	B
Withholding tax rate	25%	15%
Dividend yield	2.5%	2.5%

Fidel Okumu, an investor from Country C has Sh.1 million to invest.

Required:
Advise Fidel Okumu on which Country to invest in by computing the tax drag arising from the difference in tax rates between Country A and Country B. (6 marks)

(Total: 20 marks)

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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 24 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) Your country has organised a stakeholders' forum to discuss the "debt crisis" following sharp criticism from the industry players who have accused the government of an insatiable appetite for borrowing.

As a young CIFA graduate, you have been selected on behalf of the National Youth Forum to make a presentation on "the effects of a debt crisis on an economy".

Required:
With reference to the above statement:

(i) Propose five measures that the government of your country could put in place to mitigate against a possible debt crisis on an economy. (5 marks)

(ii) Analyse three risk exposures that your country is likely to face from external borrowing. (3 marks)

(b) Over the past five years, the exchange rate between the United States dollar, USD, and the Euro, EUR, has been fluctuating in a relatively wide range. The EUR was quoted as high as 1.39 and as low as 1.05 against the USD. One currency forecaster was recently quoted saying "I expect the currency pair to return to parity soon" while other experts expect a significant weakening of the USD.

Recently, the exchange rate between the EUR and USD was quoted as follows:

Spot rate: 1 EUR = 1.160 USD

1-year forward rate: 1 EUR = 1.199 USD

Required:

(i) Comment on the nominal one-year interest rates in the US and the Eurozone based on the above statement. (2 marks)

(ii) Assuming an inflation rate of 3% in the US and 1.8% in the Eurozone over the next 12 months, determine the theoretical value of the exchange rate between the USD and the EUR in one year based on the relative purchasing power parity (PPP) theory. (3 marks)

(iii) An analyst claims that based on the theory of absolute purchasing power parity the "USD is undervalued" at the current level.

Explain the law of "absolute purchasing power" and based on this law, explain the analyst's statement that the "USD is undervalued". (4 marks)

(iv) Describe three factors that could determine the exchange rate using the monetary approach model. (3 marks)

(Total: 20 marks)

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QUESTION TWO

(a) Explain three strategies that a multinational corporation (MNC) could apply to hedge against each of the following exposures:

(i) Long-term transaction exposure. (3 marks)

(ii) Economic exposures. (3 marks)

(b) HZ Limited uses probability distribution to forecast exchange rates.

The company is considering borrowing in Euros for one year. HZ Limited finds that the quoted interest rates for the Euros is 8% and the quoted interest rates for the United States Dollars (USD) is 15%.

The company then develops a probability distribution for the Euros possible percentage change in value over the life of the loan as provided below:

Changes in value of Euros over the life of the loan (%)	**Probability (%)**
-6	5
-4	10
-1	15
1	20
4	20
6	15
8	10
10	5

Required:

The effective interest rate for HZ Limited's loan. (4 marks)

(c) Sumeka Limited, a Kenyan based company intends to invest in a capital project to be based in Jinja, Uganda.

Additional information:

1. The project will commence on 1 January 2020 and Ush.40 million will be incurred to buy the machine. The machine will be depreciated on a straight line basis over the project's useful life estimated to be 4 years.
2. An additional Ush.24 million will be required for working capital on commencement of the project. This amount will however be recovered in full at the end of the project's useful life.
3. Annual revenue from the project are estimated as follows:

Year	**Sales (Ush.million)**
2020	30
2021	60
2022	90
2023	60

4. Variable operating costs are expected to be 20% of the annual revenue.
5. Annual fixed costs are estimated at Ush.2 million.
6. The corporation tax rate in Uganda is 30% (Assume no taxation of cash flow in Kenya).
7. The exchange rates between the Kenyan shilling (Ksh.) and the Uganda shilling (Ush.) over 4-year period is as follows:

	Ush./Ksh.
1 January 2020	18
31 December 2020	20
31 December 2021	22
31 December 2022	24
31 December 2023	26

8. All cash flows are expected to accrue at year end.
9. The cost of capital for the project is 10%.

Required:

(i) The net present (NPV) of the project. (8 marks)

(ii) Advise Sumeka Limited on whether to undertake the capital investment based on your results in (c) (i) above. (2 marks)

(Total: 20 marks)

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QUESTION THREE

(a) Tax avoidance is part of tax management strategy employed by financial managers in the world.

In light of the above statement, assess three organisational structures that multinational companies (MNCs) could employ to reduce their tax liabilities. (6 marks)

(b) Paroma Ltd. is a company incorporated in Kenya to manufacture and distribute body sprays. Currently, the company has 3 wholly owned subsidiaries in three African countries.

For the year ended 31 December 2018, Paroma Ltd. is expected to receive the following dividends from each of the three subsidiaries (net of tax in the respective foreign country):

Subsidiary	Country	Dividends received Sh."000"	Income tax rate (%)
1	X	900	40
2	Y	1,200	35
3	Z	2,250	25

Additional information:

1. The dividends received from the subsidiaries are taxable in Kenya at the rate of 30%. The taxable amount of the dividends is the gross figure before deducting foreign tax.
2. Kenya has a double taxation agreement with countries X, Y and Z. Tax relief is therefore offered in Kenya for the foreign tax though the relief does not exceed the amount of tax in Kenya.
3. The double taxation relief on the foreign tax is provided even where Paroma Ltd. channels the dividends through another subsidiary located in a tax haven country.

Required:

The tax payable in Kenya assuming Paroma Ltd. receive dividends:

(i) Directly from the respective subsidiaries. (5 marks)

(ii) Through the subsidiary located in a tax haven country. (5 marks)

(c) Consider the following bank quotation as provided by Mac Bank Limited of South Africa:

1£ = ZAR18.125

1$ = ZAR12.750

1£ = $1.475

Where: ZAR = South Africa Rand
£ = British pound
$ = United States Dollar (USD)

Suppose one of your client, Mr Tembo holds ZAR 900,000.

Required:

Using the triangular arbitrage, determine whether an arbitrage opportunity exists and advise Mr. Tembo: (4 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Discuss three techniques of assessing political risks in the context of international business. (3 marks)

(b) Many governments across the world have been accused of giving incentives to Foreign Direct Investments (FDIs) at the detriment of their home enterprises.

Critique the above statement by outlining the incentives that are provided by your government to FDIs. (3 marks)

(c) Summarise four ethical dilemmas associated with e-commerce in a global business arena. (4 marks)

(d) Argue five cases against free trade policy in your country. (5 marks)

(e) (i) Explain the term "official reserves" as used in international trade. (1 mark)

(ii) Outline four components of official reserves. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Suggest six benefits that could accrue to a country that uses a flexible exchange rate regime. (6 marks)

(b) In the modern financial market, some African countries are issuing Eurobonds to fund long-term development as most of their annual budgets are always in deficit positions. Contrary to the perception that these countries have high political risks, the uptake of these debt instruments have surpassed expectations.

Required:
With reference to the above statement:

(i) Explain three reasons why Eurobonds are usually oversubscribed by African countries. (3 marks)

(ii) Discuss two demerits of Eurobonds to issuing countries. (2 marks)

(c) Madi International Limited is a multinational company with its headquarters based in London, United Kingdom. The company has invested heavily in Asia, America and some parts of Europe. Madi Limited is considering expanding its operation in some 3 selected countries in Africa and a research analysis of factors affecting political risks in these countries has been obtained.

The table below shows the relevant variables on a scale of -10 to +10, with -10 being the most adverse score and +10 being the best possible score:

	Scores		
Variable	**Country (X)**	**Country (Y)**	**Country (Z)**
Economic growth	6	8	4
Political stability	4	-3	6
Cultural compatibility	3	0	4
Interest rates volatility	-7	-3	-5
Inflation	8	-5	6
Currency convertability	-3	6	-3
Investment incentives	-2	8	4
Natural resources	3	7	-2
Labour supply	3	8	2

Required:

(i) Interpret the above analysis in relation to investment potential in Africa. (5 marks)

(ii) Highlight four other variables not covered in the above analysis that would have a potential of influencing the decision on whether to invest in Africa. (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:

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

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	8.3938	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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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 30 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) Highlight five functions of the International Monetary Fund (IMF) in global trade. (5 marks)

(b) The following information relates to the Republic of Kanzaland for the year ended 31 December 2017:

	Sh."Billions"
Export of green tea and coffee berries	3,000
Import of goods including automobiles and textiles	5,000
Receipts from interest and dividends	1,500
Payments for dividends and royalties	1,000
Gifts from abroad	950
Gifts to foreign countries	1,050
Realised forex loss	2

Required:

(i) Current account for the year ended 31 December 2017. (5 marks)

(ii) Interpret the results obtained in (b) (i) above. (2 marks)

(iii) Enumerate two strategies that the Republic of Kanzaland could take in order to improve its current account position. (2 marks)

(c) In 2008, Satoshi Nakamoto conceptualised the distributed block chain technology which gave birth to digital currencies. To date, cryptocurrencies have revolutionised the way international payment systems and global forex online trading are being undertaken with major multinational corporations accepting cryptocurrencies as a mode of payment.

Required:

In light of the above statement:

(i) Describe three benefits that could accrue to a multinational corporation that uses cryptocurrencies in conducting international business. (3 marks)

(ii) Argue three cases why central banks or governments of many countries have been reluctant to embrace digital currencies as a form of foreign exchange. (3 marks)

(Total: 20 marks)

QUESTION TWO

(a) Explain the following terms as used in exchange rate regimes for countries that have their own currency:

(i) Currency board system. (1 mark)

(ii) Fixed parity. (1 mark)

(iii) Target zone. (1 mark)

(iv) Managed float. (1 mark)

(v) Independent float. (1 mark)

(b) Assume that annual interest rates are 8 per cent in the United States and 4 per cent in Japan. The spot rate is 120 Japanese Yen (JPY) per United States Dollar (USD) and the one-year forward rate is 114 JPY/USD.

Required:

(i) Explain whether the United States Dollar (USD) is trading at a forward premium or at a forward discount. (1 mark)

(ii) Establish whether the interest rate parity holds. (1 mark)

(iii) Illustrate how a bank using a sum of 10 million USD could take advantage of the covered interest arbitrage if any. (4 marks)

(iv) Determine the forward rate that will prevent an arbitrage opportunity to take place. (1 mark)

(c) (i) There is a difference in the tax liability levied on foreign-source of income depending upon whether a foreign branch or subsidiary form of organisational structure is selected as a form of foreign affiliate.

Elaborate on the above statement. (4 marks)

(ii) Shapiro Limited, a company based in the United States (US) is considering establishing an affiliate operation in Nairobi City, Kenya. The firm is undecided whether to establish the affiliate as a branch operation or a wholly-owned subsidiary. Kenya taxes income of both resident corporations and branch operations at a flat rate of 30%. It also withholds taxes at a rate of 15% on dividends paid by resident corporations to residents of the US. The US has an income tax rate of 35% on income earned worldwide, but gives a tax credit for taxes paid to another country.

Required:

Advise Shapiro Limited on whether to establish a branch or a subsidiary for the affiliate. (4 marks)

(Total: 20 marks)

QUESTION THREE

(a) In an integrated world financial market, a financial crisis in a country could be quickly transmitted to other countries causing a global financial crisis.

In reference to the above statement, discuss four measures that could be instituted to prevent recurrence of a global financial crisis. (4 marks)

(b) Suppose that Kenya exports vegetables to United Kingdom (UK) and imports machinery from UK. The output per worker per day in each country is as follows:

	Output per worker per day	
	Machinery	**Vegetables**
United Kingdom	8	16
Kenya	4	32

Required:

(i) Identify the country which has an absolute advantage in the production of vegetables and machinery. (2 marks)

(ii) Calculate the opportunity cost for each country. (2 marks)

(c) Samson Mwongela specialises in cross-rate arbitrage.

He notices the following quotes:

	American Terms		**European Terms**	
Bank quotations	**Bid**	**Ask**	**Bid**	**Ask**
British pounds, GBP (£)	1.4650	1.4655	0.6824	0.6826
Euros, EUR (€)	1.2233	1.2238	0.8171	0.8175

Required:

(i) Explain the term "cross-exchange rate". (1 mark)

(ii) The EUR/GBP cross-rate bid-ask spreads. (2 marks)

(iii) The GBP/EUR cross-rate bid-ask spreads. (2 marks)

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(d) Leo Gold Mining Company, a firm based in the United States (US) holds an asset in Germany and faces the following scenario:

State	Probability	Spot rate ($/€)	P* (€)	P ($)
1	0.25	1.20	1,500	1,800
2	0.25	1.10	1,400	1,540
3	0.25	1.00	1,300	1,300
4	0.25	0.90	1,200	1,080

Where: P* is the euro price of the asset
P is the dollar price of the asset
€ is the currency symbol for euro
$ is the currency symbol for United States dollar

Required:

(i) Compute the exchange exposure faced by the US firm. (3 marks)

(ii) The variance of the dollar price of this asset assuming that the firm remains unhedged against the exchange exposure. (2 marks)

(iii) The variance of the dollar value of the hedged position. (2 marks)

(Total: 20 marks)

QUESTION FOUR

(a) In relation to foreign direct investments (FDIs):

(i) Explain the internationalisation theory of FDI. (2 marks)

(ii) Suggest four reasons why multinational corporations (MNCs) would prefer to use FDI instead of direct-export while venturing into foreign markets. (4 marks)

(b) Increased globalisation of world equity markets has seen cross-listing of shares by multinational corporations explode in recent years.

Required:

(i) Examine three benefits that could accrue to a company that cross-lists its equity shares on more than one national exchange. (3 marks)

(ii) Explain three barriers to cross-listing of equity shares of a company. (3 marks)

(c) Phonex Multinational Corporation, a South Africa based company uses a decentralised system of cash management whereby Phonex MNC and its affiliates each maintain their own transaction and precautionary cash balances.

The cash needs for Phonex and its affiliates are normally distributed and independent from one another. It is the corporate policy to maintain two and one-half standard deviations of cash as precautionary holdings. At this level of safety, there is a 99.37% chance that each affiliate will have enough cash holdings to cover transactions.

As a Certified Investment and Financial Analyst (CIFA) management trainee in the company, you have noted that there is over provision of precautionary cash balances. This provision could be reduced substantially if the company could convert to a centralised cash management system.

The following information is provided:

Affiliate	Expected transactions ZAR	One standard deviation ZAR
South Africa	125,000	40,000
United States	60,000	25,000
United Kingdom	95,000	40,000
Singapore	70,000	35,000

Where: ZAR = South Africa Rand

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Required:

(i) Determine the amount of cash that Phonex MNC needs to hold in precautionary balances under the current decentralised cash management system. (4 marks)

(ii) Advise Phonex MNC on the level of precautionary cash it should hold under a centralised cash management system. (4 marks)

(Total: 20 marks)

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QUESTION FIVE

(a) Distinguish between "foreign bonds" and "Eurobonds". (2 marks)

(b) Country risk is the chance that a country could change its policies and therefore affect the ability of borrowers from those countries to honour their loan obligations.

In light of the above statement, analyse three sources of information that could be used to assess country risk. (3 marks)

(c) Assess three corporate characteristics that could influence the multinational corporation capital structure decisions. (6 marks)

(d) Olake Advisors, an international pension fund manager, uses the concepts of Purchasing Power Parity (PPP) and the International Fisher Effect (IFE) to forecast spot exchange rates.

The following information has been provided:

Base price level	100
Current United States (US) price level	105
Current South African (SA) price level	111
Base South African rand (ZAR) spot exchange rate	$0.175
Current South African rand (ZAR) spot exchange rate	$0.158
Expected annual US inflation	7%
Expected annual South African inflation	5%
Expected US One-year interest rate	10%
Expected South African one-year interest rate	8%

Required:

Calculate the following exchange rates:

(i) The current ZAR spot rate in USD that would have been forecast by PPP. (2 marks)

(ii) The expected ZAR spot rate in USD one year from now using the IFE. (2 marks)

(iii) The expected ZAR spot rate in USD four years from now using PPP. (2 marks)

(e) Falcon Multinational Corporation has an optimal debt ratio of 40%. The company also has a 12% cost of equity and 8% before tax borrowing rate.

The marginal tax rate for the company is 35%.

Required:

(i) The weighted average cost of capital (WACC) of the company. (1 mark)

(ii) The cost of equity for an equivalent all-equity financed firm. (2 marks)

(Total: 20 marks)

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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 25 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) The balance of payments is a summary of all financial flows between a country and all other countries over a specific period.

In light of the above statement, identify three components of the balance of payments. (3 marks)

(b) "Africa must unite" wrote Kwame Nkrumah, Ghanaian first President, in 1963, lamenting that African countries sold raw materials to their former colonisers rather than trading among themselves. His Pan-African dream never became a reality. However, that spirit of unity now animates a push for an African Continental-Free-Trade Area (ACFTA), involving all 55 countries in the region of which 44 countries had already signed a pact establishing the free trade area by March 2018.

In relation to the above statement, propose five factors that could have influenced the integration of the African markets. (5 marks)

(c) Distinguish between "absolute purchasing power parity" and "relative purchasing power parity". (2 marks)

(d) Assume that the South African Rand (ZAR) exhibits a 6-month interest rate of 6% while the Kenyan shilling (KES) exhibits a 6-month interest rate of 5%. Further, assume that the KES is the home currency.

Required:

(i) Using the interest rate parity, compute the forward rate premium of the South African Rand (ZAR). (2 marks)

(ii) Based on your results in (d)(i) above, compute the 6-month forward rate asuming that the South African Rand (ZAR) current spot rate is KES 8.1/ZAR. (2 marks)

(e) Quantum African Limited is a Kenyan-based multinational company which owns 100% subsidiaries in Mali, DRC, Togo and Chad. Due to DRC and Togo having their general elections in 2017, their cash inflows were relatively lower than the forecasted.

The following were cash flows for the month of December 2017:

Paying subsidiary	Amount Ksh."million"	Receiving subsidiary
Chad	50	DRC
Chad	40	Mali
DRC	25	Chad
DRC	20	Mali
DRC	30	Togo
Togo	20	DRC
Togo	25	Mali
Mali	40	Chad
Mali	60	DRC
Mali	50	Togo

Required:

(i) Illustrate how the subsidiaries could benefit from multinational netting. (5 marks)

(ii) Explain how the subsidiaries could benefit from multilateral netting illustrated in (e)(i) above. (1 mark)

(Total: 20 marks)

QUESTION TWO

(a) Evaluate three strategies that the government of your country could apply to improve foreign exchange restrictions. (6 marks)

(b) Explain three economic factors that should be considered when measuring the country risk. (3 marks)

(c) (i) In relation to international investments, differentiate between "covered interest arbitrage" and "interest hedging". (2 marks)

(ii) Royal Airlines is intending to hedge 1,200,000 Kenya shillings (KES) in ticket sales receivable in 90 days. The following exchange and interest rates are applicable.

Spot rate: KES/ZAR	7.9
90-day forward rate KES/ZAR	8.0
90-day Kenya interest rate	2.5%
180-day interest rate in South Africa	7.0%

Note: ZAR stands for the South African Rand.

Required:

Using suitable computations, advise Royal Airlines if there exists any arbitrage opportunity. (6 marks)

(d) The exchange rate between Japanese Yen (JPY) and the United States Dollar (USD), USD:JPY is 119.05 – 121.95. The exchange rate between the Euro, EUR and the USD, USD:EUR is 0.792 – 0.7932.

Required:

(i) Calculate the direct quote between the JPY and EUR. (2 marks)

(ii) Identify the bid price and ask price based on your answer in (d) (i) above. (1 mark)

(Total: 20 marks)

QUESTION THREE

(a) Propose five factors that could complicate capital budgeting for multinational corporations relative to domestic firms. (5 marks)

(b) Explain the following Theories of international trade:

(i) Comparative advantage Theory. (1 mark)

(ii) New trade Theory. (1 mark)

(iii) Location Theory. (1 mark)

(iv) Internalisation Theory. (1 mark)

(c) Tembo Limited, a company based in Kenya intends to invest in the United States of America (USA). The project will entail an initial cash outlay of 250 million United States dollars ($). The project is expected to generate the following cash flows over its five-year life:

Year	Cash flow ($ "million")
1	70
2	90
3	100
4	120
5	80

The current spot exchange rate is 100 Kenya shillings per United States dollar ($). The risk-free rate in Kenya is 10% and the risk-free rate in the U.S. is 6%. Tembo Limited's required rate of return on the project is 16%.

Required:

(i) The net present (NPV) of the project. (10 marks)

(ii) Advise the management of Tembo Limited on whether to undertake the project based on your answer in (c) (i) above. (1 mark)

(Total: 20 marks)

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QUESTION FOUR

(a) Distinguish between "Eurobonds" and "dual-currency bonds" as used in international financial markets. (2 marks)

(b) Philip Mackenzie, a United States (US) resident, holds a piece of land in the city of London which he intends to sell in one year's time. It is expected that, the British economy will boom in the near future and the value of the land will be £2,000 while the value of the British Pound (£) will be worth $1.40/£. If the British economy slows down, on the other hand, the land will be worth £1,500 but the exchange rate will be $1.50/£. Philip estimates that the British economy will experience a boom with 60% probability and a slow down probability of 40%.

Required:

(i) Estimate Philip Mackenzie's exposure to the exchange rate risk. (4 marks)

(ii) Compute the variance of the dollar value of land that is attributable to the exchange rate uncertainty. (2 marks)

(iii) Explain how Philip could hedge against foreign exchange exposure based on your answer in (b) (i) above. (1 mark)

(c) Many financial managers prefer to use options to hedge their exposure because it allows them to capitalise on favourable movements in the exchange rates. In contrast, a company using forward contracts avoids the downside but also loses the upside potentials as well.

Comment on this strategy. (3 marks)

(d) Johnson Mwandawiro is a portfolio manager at Amanda Asset Managers (AAM), a firm based in the United States. AAM manages a portfolio of $100 billion from its high net worth clients. Mwandawiro is contemplating investing part of the funds in emerging markets equities to maximise its investors returns.

Required:

Advise the portfolio manager on two major factors that he should consider before investing in the emerging stock markets. (4 marks)

(e) HZ Ltd., a subsidiary of a Kenyan company based in Uganda had the following balance sheet as at 31 December 2017:

Assets:	**UGX "000"**
Cash and marketable securities	14,000
Accounts receivable	36,000
Inventory	62,000
Net fixed assets	126,000
	238,000
Liabilities:	
Accounts payable	28,000
Short-term debts	16,000
Long-term debts	90,000
Equity	104,000
	238,000

The current spot rate is KES 0.02745/UGX

Note: UGX is the symbol for the Uganda shilling.

Required:

Calculate HZ Ltd.'s accounting exposure under the following methods:

(i) Current/non-current method. (1 mark)

(ii) Monetary/non-monetary method. (1 mark)

(iii) Temporal method. (1 mark)

(iv) Current rate method. (1 mark)

(Total: 20 marks)

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QUESTION FIVE

(a) (i) In the context of international tax environment, illustrate how double taxation could affect all countries of the world if they were to tax their residents worldwide income and the income they earn within their territorial boundaries. (4 marks)

(ii) Discuss two methods that could be used by the tax authorities to eliminate the negative effects of double taxation. (2 marks)

(b) Assess three methods that could be used by multinational corporations (MNCs) to repatriate blocked funds from a host country. (6 marks)

(c) Naibu Bank intends to open an overseas branch in the next two years.

Examine five benefits that could accrue to the bank from undertaking such a move. (5 marks)

(d) Babito Limited, a successful Kenyan multinational corporation is considering to seek for financing for a project based in Rwanda. The following information is provided:

1.	Kenyan risk-free interest rate.	6%
2.	Rwandan risk-free interest rate.	10%
3.	Risk premium on Kenyan shilling (KSh.) denominated debt provided by Kenyan creditors.	3%.
4.	Risk premium on Rwandan Franc (FRw) denominated debt provided by Rwandan creditors.	5%
5.	Beta of the project.	1.5
6.	Expected Kenyan market return.	14%
7.	Corporate tax rate in Kenya.	30%
8.	Creditors will likely not allow more than 50 percent of the financing to be in the form of debt.	

Required:

(i) Cost of Kenyan shilling-denominated debt. (1 mark)

(ii) Cost of Rwandan Franc-denominated debt. (1 mark)

(iii) Cost of Kenyan-shilling denominated equity. (1 mark)

(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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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 1 December 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) Examine six causes of balance of payments (BOP) disequilibrium in a country. (6 marks)

(b) Capricon Limited, a company based in Kenya, exports milk to Ghana but the strong Kenyan shilling (KES) against the Ghanaian Cedi (GHS) hurts sales of the company's milk in Ghana. In the Ghanaian market, Capricorn Limited faces competition from milk producers in Cameroon and Mali whose currencies remain stable relative to the value of Cedi.

Required:
Suggest four measures that you would recommend to Capricon Limited to enable it maintain its market share in Ghana. (4 marks)

(c) (i) Explain the term "currency crisis". (1 mark)

(ii) Describe five warning signs of a currency crisis in a country. (5 marks)

(d) You have recently been hired as a financial analyst at Urembo Limited, a locally incorporated company that deals in beauty products imported from the United States of America (USA). As the person in charge of negotiating rates of exchange at Urembo Limited, you have realised that the Kenyan shilling has recently been weakening against the United States Dollar (USD), the currency that settles the suppliers payments.

Assume that you have received real time spot quotations from your local bank as follows:

1£	=	$1.9724
1€	=	$1.3450
1£	=	€1.4655

Required:
Illustrate how you could benefit from triangular arbitrage when settling a payment worth 5 million USD. (4 marks)
(Total: 20 marks)

QUESTION TWO

(a) Identify four participants in a foreign exchange market, citing one role played by each. (4 marks)

(b) The following information relates to exchange rates in the United States and Canada:

Spot exchange rate (CAD/USD)	1.2923
1 – year treasury bill interest rate in the United States	0.55%
1 – year treasury bill interest rate in Canada	0.95%

Required:

(i) Compute the one-year forward rate. (2 marks)

(ii) Interpret the results in (b) (i) above. (1 mark)

(c) Describe the following types of fixed exchange rate regimes:

(i) No separate legal tender system. (1 mark)

(ii) Shared currency system. (1 mark)

(iii) Currency board system. (1 mark)

(iv) Target zone system. (1 mark)

(v) Fixed parity system. (1 mark)

(d) Distinguish between "sterilized intervention" and "unsterilized intervention" as used in the foreign exchange market. (4 marks)

(e) Sarah Adams, a United States of America (USA) based investor has 10,000 United States dollars (USD). She intends to invest in Petho Limited's shares, a firm quoted at the Nairobi Securities Exchange (NSE) in Kenya. The market price per share of Petho Limited's shares is KES 50. The spot exchange rate is 1USD = 105.20 KES.

Required:

(i) The number of Petho Limited's shares that Sarah Adams could purchase. (2 marks)

(ii) The investor's return assuming that in one year, the market price of Petho Limited's shares has increased to KES 55 per share and that the exchange rate has changed to 1 USD = 108.55 KES. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Discuss three Trade Related Investment Measures (TRIMs) that distorted the smooth flow of international business and which are now prohibited by the General Agreement on Trade and Tariffs (GATTs). (6 marks)

(b) Zulu Limited is a South African company that supplies tanned leather to Shoetec Ltd., a US based company. Zulu Limited has invoiced Shoetec Ltd. and is meant to receive 500,000 United States dollars (USD) in 180 days.

The following information, as quoted in the Johannesburg Stock Exchange (JSE) shows the indicative exchange rates and interest rates:

90 – day South African interest rate	7.75%
90 – day United States interest rate	9.25%
90 – day forward exchange rate of USD	ZAR 1.080
Spot rate of USD	ZAR 1.095

Note: ZAR is the South African Rand.

Required:

Determine the amount to be received by Zulu Limited using:

(i) Forward contract hedge. (2 marks)

(ii) Money market hedge. (4 marks)

(c) Advise Zulu Limited on the most appropriate hedge based on your calculations in (b) (i) and (ii) above. (1 mark)

(d) The following data obtained from Penbreak Investments Ltd. relates to inflation and interest rates movement for two countries, Rwanda and Kenya, over the period between years 2013 and 2017:

Country	**Exchange rate (KES/RWF)**	**Consumer Price Index (CPI)**
Kenya	6.50 – 4.90	103.60 – 151.50
Rwanda		79.60 – 167.90

Required:

(i) If purchasing power parity (PPP) had held over this period, determine the KES/RWF exchange rate in year 2017. (3 marks)

(ii) Interpret your result in (d) (i) above. (1 mark)

(e) Discuss three services that international banks could provide to their customers. (3 marks)

(Total: 20 marks)

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QUESTION FOUR

(a) (i) Distinguish between the terms "Greenfield investment" and "Brownfield investment" in relation to foreign direct investments (FDI's). (2 marks)

(ii) Citing three reasons, justify why firms prefer acquisition compared to Greenfield investment when conducting international business. (3 marks)

(b) Flamingo Limited is an agro-based company incorporated in Kenya. The company intends to invest in a capital project which will be based in Cape Town, South Africa.

Additional information:

1. The project will commence on 1 January 2018 with the initial capital of 5 million South African Rands (ZAR) which will be used in acquiring agricultural machinery with an estimated useful life of 5 years. The straight line method of depreciation will be applied.
2. To enable the firm pay land rates and other working capital requirements, an additional 2.5 million ZAR will be required and it is expected that this amount will be recouped in full at the end of the project's useful life.
3. Annual sales revenue from the project are estimated as follows:

Year	Revenue (ZAR)	Fixed costs (ZAR)
2018	2,600,000	600,000
2019	3,500,000	780,000
2020	5,000,000	905,000
2021	4,200,000	880,000
2022	2,800,000	450,000

4. Variable operating costs are expected to be a 1/5 of the sales and are assumed to accrue evenly.
5. The exchange rates between the Kenya Shilling and the South Africa Rand are as follows:

	ZAR/KES
1 January 2018	8.00
31 December 2018	8.50
31 December 2019	9.00
31 December 2020	9.50
31 December 2021	10.00
31 December 2022	10.30

6. All the cash flows are expected to occur at the year end.
7. The cost of capital for both South Africa and Kenya is assumed to be 12% per annum.
8. Assume that the corporation tax rate in South Africa is 30% and no further taxation will be levied in Kenya.

Required:

(i) The net present value (NPV) of the project in KES. (8 marks)

(ii) Based on your results in (b) (i) above, advise Flamingo Limited. (1 mark)

(iii) Recommend the type of hedge that Flamingo Limited, being an agro-based company, could employ to cushion itself against the negative effects of weather. (1 mark)

(c) As an experienced investment and financial analyst, you have been consulted by Wesco International Investment Group (WIIG), a company based in the United States which is considering setting up a subsidiary in your country. The management of WIIG is concerned that your country is expecting to hold a general election at the end of this year.

Required:

(i) Advise WIIG on three political risks that the subsidiary might face in your country. (3 marks)

(ii) Suggest relevant mitigating factors that WIIG could adopt to address the risks identified in (c) (i) above. (2 marks)

(Total: 20 marks)

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QUESTION FIVE

(a) In relation to the international tax environment:

(i) Describe three criteria for determining tax neutrality. (3 marks)

(ii) Examine three methods that the tax authority of your country might use to determine if transfer price is reasonable. (3 marks)

(b) (i) Assess three merits that would accrue to a multinational corporation (MNC) that has a centralised cash manager who handles all investment and borrowing for all affiliates of the MNC, versus each affiliate having a local manager who performs the cash management activities of the affiliate only. (3 marks)

(ii) The following information relates to interaffiliate cash flows:

Affiliate	**Expected transactions (USD"000")**	**Standard deviation (USD"000")**
Kenya	100	40
Uganda	150	60
Pakistan	175	30
China	200	70

Assume that the interaffiliate cash flows are uncorrelated with one another.

Required:
The standard deviation of the portfolio of cash held by the centralised depository. (2 marks)

(c) The Basel II accord sets out rules on core disclosure areas that should be met by banks and which must be enforced by bank supervisors.

In relation to the above statement, explain three disclosures mentioned in the Basel II accord of bank regulation. (3 marks)

(d) Today's global market presents a variety of ethical dilemmas for multinational corporations. This ethical decision-making process becomes particularly challenging when the ethical standards in the company's home country are higher than those in the subsidiary's markets.

Required:
In relation to the above statement, examine six unethical business practices that multinational corporation managers could engage in while conducting international business. (6 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:

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

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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KASNEB

CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 26 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) Examine four reasons that could motivate a company to consider engaging in international business. (4 marks)

(b) Among the factors that affect the financial account of a country is changes in the investment climate.

In relation to the above statement, describe four desired attributes of a good investment climate for a multinational corporation (MNC). (4 marks)

(c) Distinguish between the following terms as used in international trade:

(i) "Comparative advantage" and "absolute advantage". (2 marks)

(ii) "Currency cocktail bonds" and "syndicated loans". (2 marks)

(d) Victoria Gakii, a Certified Investment and Financial Analyst (CIFA) has been invited by the Pan African Chamber of Commerce (PACC) to their annual investment conference and has been requested to make a presentation on "The benefits of East African Community trading block".

Required:
Assess four benefits that she would mention in her presentation. (8 marks)
(Total: 20 marks)

QUESTION TWO

(a) (i) Highlight four factors that could affect the spread at the forex market. (4 marks)

(ii) Joan Lesuda, an international money market investor is presented with a bid price of 1.0578 United States Dollar (USD) per Euro against an ask price of 1.0587 USD per Euro.

Required:
The bid-ask spread as a direct quote from the perspective of a European investor. (2 marks)

(b) Digimax Ventures Limited specialises in the importation of computers from Argentina for sale in selected outlets in Kenya. On 1 March 2017, the company imported a consignment worth 2,000,000 Argentine Peso (ARS). The company would be expected to settle the amount by 1 June 2017 as it enjoys three months credit.

The spot rates on 1 March 2017 and 1 June 2017 are as shown below:

Date:	**Quote: KES/ARS**
1 March 2017	0.0125
1 June 2017	0.0122

On June 2017, the shillings futures are forecasted to trade at 0.01275 KES/ARS (Contract size: KES.2,402,000) as at 1 March 2017.

Required:

(i) Illustrate how Digimax Ventures Limited could have used a futures contract as a hedging tool indicating any hedging gain or loss. (6 marks)

(ii) The number of futures contracts that Digimax Ventures Limited would have purchased assuming the contract size was KES 4,000,000. (2 marks)

(c) Dominic Mwamba, a treasury manager at Bebra Ltd., a multinational corporation, is planning to invest the firms excess cash in a foreign deposit account.

Required:
In relation to the above statement, justify why Dominic Mwamba would prefer to use effective yield compared to interest rate when negotiating a deposit rate with the foreign bank. (2 marks)

(d) Baraka Multinational Corporation (MNC) has excess cash of Sh.100 million which could be invested in Kenya at the prevailing interest rate of 8% per annum but is attracted to higher interest rates in Uganda.

Required:
The effective yield assuming that the Ugandan interest rate on deposit is 9.5% per annum and the exchange rate at the time of deposit is 30 Uganda Shillings per Kenya Shilling (UGS/KES) and that one year later the KES depreciates to 28.50 UGS/KES. (2 marks)

(e) Winnie Leticia, a foreign exchange trader assesses the euro exchange rate for three months as shown below:

Spot rate ($)	Probability
1.10	0.25
1.13	0.50
1.15	0.25

The 90-day forward rate is $ 1.12.

Required:
Determine whether Winnie Leticia should buy or sell Euros forward against the Dollar assuming that the trader is concerned solely with expected value. (2 marks)
(Total: 20 marks)

QUESTION THREE

(a) Evaluate four ways in which an investor could benefit from understanding the international parity relationship. (4 marks)

(b) (i) Compare and contrast the three basic types of taxation that governments levy within their tax jurisdiction. (6 marks)

(ii) Affiliate A sells 20,000 units to Affiliate B per year. The marginal tax rates for Affiliate A and Affiliate B are 20 percent and 30 percent, respectively. The transfer price per unit is currently set at 1,500 US Dollars ($) but it can be set at as high as $1,750.

Required:
The increase in the annual after-tax profits assuming that the higher transfer price of £1,750 per unit is used. (2 marks)

(c) (i) Assess four benefits of interest rate swaps and currency swaps to a multinational corporation (MNC). (4 marks)

(ii) Johazi Limited intends to borrow 30 million US dollars for a period of six years with interest payable within six monthly intervals. The company could borrow from a bank at a floating rate of 182-day Treasury bill plus 1% but would wish to obtain a fixed rate for the full year period.

A swap bank has indicated that it would be willing to receive a fixed rate of 9% in exchange for payments of 182-day Treasury bill.

Required:
The fixed interest six monthly payment with the swap in place. (4 marks)
(Total: 20 marks)

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QUESTION FOUR

(a) Explain the following terms in the context of international capital structure and the cost of capital:

(i) Pricing spillover effect. (1 mark)

(ii) Pricing-to-market (PTM) phenomenon. (1 mark)

(b) The following information relates to Aquiva Limited, an electrical company located in Kenya, Nairobi Securities Exchange (NSE) market index, and the world market index, together with the standard deviation (SD) of returns and the expected return ($\overline{ER}$):

	Correlation coefficients				
	Aquiva Limited	**Kenya**	**World**	**SD(%)**	**$\overline{ER}$ (%)**
Aquiva Limited	1.00	0.80	0.60	16	?
Kenya		1.00	0.75	15	13
World			1.00	12	14

The risk-free rate is 5%.

Required:

(i) The domestic country beta of Aquiva Limited. (2 marks)

(ii) The World beta. (2 marks)

(iii) The equity cost of capital of Aquiva Limited using the capital asset pricing model (CAPM) assuming that the Kenyan securities market is segmented from the rest of the world. (2 marks)

(iv) Aquiva Limited's equity cost of capital using CAPM assuming that the Kenyan securities market is integrated with the rest of the world. (2 marks)

(v) Discuss the possible effects of international pricing of Aquiva Limited shares on the share prices and the firms investment decision based on results obtained in (b)(iii) and (b)(iv) above. (2 marks)

(c) (i) Accounting for cost of capital for multinational corporations differs to a certain extent from that of domestic firms.

In relation to the above statement, explain three approaches in which transfer risk could be accounted for in the net present value (NPV) calculations. (3 marks)

(ii) Medusa Limited intends to invest in a project costing 100 million United States Dollars ($) with an expected after tax cash flows of $20 million to perpetuity.

Additional information:

1. The risk free rate is 6%.
2. The asset beta is 1.5.
3. The required return on market is 12%.
4. The cost of debt is 8%.
5. The annual interest costs related to the project are $4 million.
6. The corporation tax rate is 30%.

Required:

The adjusted present value (APV) of the project. (5 marks)

(Total: 20 marks)

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QUESTION FIVE

(a) The aftermath of the international debt crisis triggered a wide range of reforms particularly to the international banking sector. One of the requirements was the formulation of Basel III Accord framework.

Required:
In relation to the above statement, describe three elements of Basel III Accord. (3 marks)

(b) Discuss six strategies that could be used by a company intending to invest in a foreign market. (6 marks)

(c) Highlight five disadvantages of the fixed exchange rate system. (5 marks)

(d) Sunset Limited is a Kenyan based multinational company that purchases spices in bulk from foreign countries, packages them, and sells them through three other sales affiliates namely: Uganda, Tanzania and Rwanda. The four affiliates experience major cash flows amongst themselves.

The following payment matrix relates to the inter-affiliate cash flows for the month of April 2017:

Sunset Limited payment matrix

Disbursements

Receipts	**Kenya**	**Uganda**	**Tanzania**	**Rwanda**	**Total Receipts**
	Sh. "million"	**Sh. "million"**	**Sh. "million"**	**Sh. "million"**	**Sh. "million"**
Kenya	-	40	75	55	170
Uganda	8	-	-	22	30
Tanzania	15	-	-	17	32
Rwanda	11	25	9	-	45
Total disbursements	34	65	84	94	277

Required:

(i) Using appropriate tables, illustrate how Sunset Limited could use multilateral netting to minimise the foreign exchange transactions necessary to settle inter-affiliate payments. (5 marks)

(ii) Determine the savings from the multilateral netting assuming that the foreign exchange transactions cost the company 0.5%. (1 mark)

(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:

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

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	3.1642	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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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 25 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) Analyse four components of the financial account as used in the balance of payments of a country. (4 marks)

(b) Summarise five assumptions of the theory of comparative advantage as postulated by David Ricardo (1817). (5 marks)

(c) In an effort to integrate the world trade, a great milestone has been achieved towards globalisation of the world economy. World's businesses are turning to foreign sales and cross-border partnerships as paths towards expansion and consolidation.

In relation to the above statement, discuss four events and trends that could have contributed to the reduced restrictions and increased international trade. (8 marks)

(d) Explain three sources of short-term borrowing that could be used by a multinational corporation to finance its operations. (3 marks)

(Total: 20 marks)

QUESTION TWO

(a) The value of your country's currency has been experiencing a drastic downward decrease in value relative to other major world currencies.

In relation to the above statement, discuss four strategies that could be adopted by the central bank of your country to stabilise the local currency. (8 marks)

(b) Evaluate four benefits that could accrue to a multinational corporation (MNC) that uses bilateral netting. (4 marks)

(c) Assume that the following exchange rate information is available between the United States of America (USA) and Britain:

	USA	Britain
Nominal interest rate	4%	6%
Expected inflation rate	2%	5%
Spot rate	-	$1.13
One year forward rate	-	$1.10

Required:

(i) The forward rate of the British pound (GBP) assuming interest rate parity exists between the USA and Britain. (2 marks)

(ii) The expected spot rate of the GBP in one year assuming the purchasing power parity (PPP) holds between the USA and Britain. (2 marks)

(iii) The expected spot rate of the GBP in one year assuming the international fisher effect (IFE) holds between the USA and Britain. (2 marks)

(iv) Describe two methods that could be used to determine whether the purchasing power parity (PPP) exists among countries. (2 marks)

(Total: 20 marks)

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QUESTION THREE

(a) Evaluate three financial techniques that could be used by a multinational corporation to reduce its transaction exposure. (6 marks)

(b) Jozovina Limited, a Kenyan based multinational firm, is considering investing in a project to be based in South Africa. The project will have an initial capital outlay of 125 million South African Rands (ZAR). The project will have a debt ratio of 60%.

The project is expected to generate the following free cash flows for the next 5 years:

Year	1	2	3	4	5
Net cash flow (ZAR "million")	25	28	30	35	40

Additional information:

1. The economic data between the two countries are as follows:

	Kenya	**South Africa**
Inflation rate	14%	6%
Bond yield	10.7%	9%
Risk premium	12%	8%
Interest rate	14.5%	12%
Tax rate	30%	25%

2. The spot exchange rate is 1 ZAR = KES14.
3. The international Beta factor is 0.8.

Required:

(i) The weighted average cost of capital (WACC) of the project. (3 marks)

(ii) The net present value (NPV) of the project in Kenya shillings (KES). (10 marks)

(iii) Advise the management of Jozovina Limited on whether to proceed with the project based on your results in (b)(ii) above. (1 mark)

(Total: 20 marks)

QUESTION FOUR

(a) In an international trade forum, one of the facilitators noted that the majority of the developing countries and less developed countries normally have a budgeting deficit where expenditure exceeds revenue.

In relation to the above statement, propose three reasons which could trigger deficit financing in a given country. (3 marks)

(b) Assess five objectives of the European Union (EU) trading bloc. (5 marks)

(c) Discuss four operating structures that could help a multinational corporation (MNC) to manage its cash flows. (4 marks)

(d) Assume the following information between the Canadian dollar (CAD) and the British pound (GBP):

- Spot rate of CAD = £0.4400
- 90-day forward rate of CAD = £0.4345
- 90-day Canadian interest rate = 4%
- 90-day British interest rate = 2.5%

Required:

(i) The yield to a British investor who uses covered interest arbitrage. (Assume the investor invests GBP 1,000,000) (4 marks)

(ii) Propose the market forces that would occur to eliminate any further possibilities of covered interest arbitrage identified in (d)(i) above. (2 marks)

(e) Distinguish between "tax drag" and "tax haven" in the context of international tax management. (2 marks)

(Total: 20 marks)

QUESTION FIVE

(a) In order to encourage foreign direct investment (FDI), many governments provide incentives to multinational corporations (MNCs) to set up industries in their host countries.

In relation to the above statement, explain six areas of conflicts that could arise between the MNC and the host government. (6 marks)

(b) Assess five forms of political risk that could impede the performance of a local subsidiary. (10 marks)

(c) Warfen Limited believes that future real interest rate movements will affect exchange rates and it has applied regression analysis to analyse historical data so as to assess the relationship. The corporation intends to use regression coefficients derived from this analysis along with forecasted real interest rate movements to predict exchange rates in the future.

Required:
In relation to the above statement, explain four limitations of using regression analysis forecasting method in predicting the foreign exchange rate. (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:

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

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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CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 27 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) (i) Illustrate the relationship between the product life cycle theory and both international trade and international investment. (3 marks)

(ii) Highlight three assumptions of product life cycle theory. (3 marks)

(b) Evaluate six methods that could be used by multinational corporations (MNCs) to conduct international business. (6 marks)

(c) Summarise four reasons why a weak domestic currency might not be a perfect solution to correct a balance of trade deficit in international trade. (4 marks)

(d) Describe four methods of payments that could be used by multinational corporations (MNCs) while conducting international trade. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Examine four ethical dilemmas that could be faced by multinational corporations (MNCs) while conducting international business. (8 marks)

(b) Rhonda Anita has 1 million United States dollars ($) and specialises in cross-rate arbitrage. She observes the following quotes from the foreign exchange dealer:

Euro (€) /United States Dollar ($):	0.7000 – 0.7010
United States Dollar ($) /British Pound (£):	1.7000 – 1.7010
Euro (€) /British Pound (£):	1.2000 – 0.2010

Required:
The arbitrage profit in United States dollar ($) assuming that there are no transaction costs. (6 marks)

(c) Citing three reasons, justify the cause for central banks' intervention to control the foreign exchange rate in their respective countries. (6 marks)

(Total: 20 marks)

QUESTION THREE

(e) (i) Explain the term "Bank Stress Test" in relation to bank management of loan exposure. (2 marks)

(ii) The recent trends in the banking industry have seen some commercial banks being placed under receivership or even liquidation by the regulator due to poor disclosure policies on non-performing loans.

In light of the above statement, propose six factors that could act as a catalyst for loans default and consequently lead to massive non-performing loans in the banking sector. (6 marks)

(f) Finix Ventures Limited (FVL) intends to make a $100 million payment in three months' time. The money is available now. You work as an investment and financial advisor for the company and you are provided with the following information:

- United States dollar ($) deposit interest rate is 8% per annum.
- Sterling pound (£) deposit interest rate is 10% per annum.
- Spot exchange rate is $1.40/£.
- Three-month forward rate is $ 1.38/£.

Required:

(i) Using suitable computations, advise FVL on the best strategy to invest the $100 million. (3 marks)

(ii) Determine the forward rate that would yield an equilibrium situation assuming that the interest rates and the spot exchange rate remain the same in both countries. (3 marks)

(iii) Using suitable computations, advise the company on the best way of investing the $100 million assuming the Sterling Pound deposit interest rate was 16% per annum. Assume that the US dollar interest rate, the spot rate and forward rate remain the same. (3 marks)

(iv) Determine the equilibrium Sterling Pound (£) deposit interest rate assuming that the stated spot rate, the forward rate and the dollar deposit interest rate remain the same. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) The following cost and revenue information relates to Zobby Limited, a multinational corporation based in the United States (US) which purchases most of its materials from Canada and generates a small portion of its sales from exporting its products to Canada.

	US Business $"million"	Canadian Business $"million"
Sales	2,560	32
Cost of materials	400	1,600
Operating expenses	480	-
Interest expenses	24	80
Cash flow	**1,656**	**1,648**

Additional information:

1. Assume that Zobby Limited expects three possible exchange rate scenarios for the Canadian dollar over the period of concern as follows:
   - $0.75
   - $0.80
   - $0.85
2. Assume that U.S. sales will be unaffected by the exchange rates.
3. Assume that the Canadian dollars (C$) earnings will be remitted to the U.S. parent company at the end of the period.
4. Ignore possible tax effects.

Required:

(i) Using relevant computations, assess Zobby Limited's economic exposure under the above three scenarios. (6 marks)

(ii) Comment on the results obtained in (a)(i) above. (2 marks)

(b) Tivec Beauties, a multinational company based in Kenya is considering establishing a 4-year venture in Rwanda that would manufacture and sell shoes locally

Additional information:

1. The project would require 20 million Rwanda Francs (RWF) which would include funds to support working capital needs.
2. The spot exchange rate is KSh.0.125/RWF which is expected to remain constant for all future periods.
3. The estimated price, variable cost and demand schedules during each of the next 4 years are as follows:

Year	1	2	3	4
Unit cost per shoe (RWF)	700	700	760	800
Demand in Rwanda (units)	50,000	50,000	80,000	100,000
Variable cost per shoe (RWF)	500	500	550	580

4. The expenses of leasing extra office space is RWF 2 million per annum. Other annual overhead expenses are expected to be RWF 2 million per annum.
5. Depreciation on plant and machinery in Rwanda has been fixed at a maximum rate of RWF 4 million per annum.
6. The Rwandan government will impose a corporate tax at a rate of 20% on income. In addition, it will impose a 10% withholding tax on any funds remitted by the subsidiary to the parent.

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The Kenyan government will allow a tax credit on taxes paid in Rwanda, therefore, earnings remitted to the Kenyan parent will not be taxed.

7. The subsidiary plans to send all net cash flows received to the parent company at the end of each year.
8. The Rwandan government will pay the parent company RWF 12 million to take over the ownership of the subsidiary at the end of the four years. Assume that there is no capital gains tax on the sale of the subsidiary.
9. The required rate of return of the project is 14%.

Required:
Advise Tivec Beauties on whether to undertake the project. (12 marks)
(Total: 20 marks)

QUESTION FIVE

(a) (i) Evaluate four techniques that could be adopted by a multinational corporation to optimise its cash flow management. (4 marks)

(ii) Cider Limited, a large South African based multinational corporation has 1 million South African Rand (ZAR) in excess cash. The corporation wishes to invest this excess cash in South Africa in a 1-year deposit at a rate of 8 per cent per annum but is attracted to higher interest rates in Kenya. It creates a 1-year deposit denominated in Kenya shillings (KES) at an annual interest rate of 12 per cent. The exchange rate of the Kenya shilling at the time of the deposit is KES 7.5/ZAR where the 1-year forward rate is KES 8.0/ZAR.

Required:
The yield on ZAR 1 million investment. (3 marks)

(b) Recent trends have seen several multinational corporations and individual countries float eurobonds at the international bond market.

Based on the above statement, summarise five advantages of the eurobond market to borrowers. (5 marks)

(c) Discuss four barriers to foreign direct investment (FDI). (8 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:

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

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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KASNEB

CIFA PART III SECTION 6

INTERNATIONAL FINANCE

FRIDAY: 27 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) Explain three major functions of the foreign exchange market, citing relevant players in each case. (6 marks)

(b) In relation to purchasing power parity (PPP), discuss the following terms:

(i) The law of one price. (2 marks)

(ii) Absolute purchasing power parity. (3 marks)

(iii) Relative purchasing power parity. (3 marks)

(c) You are provided with the following market conditions:

- Annual interest rate in Japan: 1.0% per annum.
- Annual interest rate in Germany: 6.0% per annum.
- Current spot exchange rate: Japanese Yen (¥)114.4733/Euro (€).
- One-year forward exchange rate: ¥110.2423/€

An arbitrager borrows ¥100,000,000 or its equivalent € amount.

Required:

(i) Determine whether interest rate parity (IRP) is holding. (Ignore transaction costs). (2 marks)

(ii) Determine the arbitrage profit. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Explain the following exchange rate regimes based on international monetary fund (IMF) classification:

(i) Fixed or pegged exchange rate system. (1 mark)

(ii) Free floating or flexible exchange rate system. (1 mark)

(iii) Managed floating exchange rate system. (1 mark)

(b) Evaluate two advantages and two disadvantages of a free floating exchange rate system. (4 marks)

(c) Summarise three benefits of regulating bank capital. (3 marks)

(d) Philip Woods, a resident of United States of America who is a venture capitalist holds a major stake in a motor vehicle manufacturing plant in London, Britain. He is concerned with the Pound value of his British equity position and has provided you with the following scenarios:

1. If the British economy booms in the future, his stake would be worth 980,000 Sterling Pounds (£) and the exchange rate would be United States Dollars ($)1.40/£.
2. If the British economy experiences a recession, his equity would be worth £1,000,000 and the exchange rate would be $1.50/£.
3. If the British economy stagnates, his equity would be worth £1,070,000 and the exchange rate would be $1.60/£.
4. The probability that the British economy would experience either of the above possible states would be a third ($^1/_3$) for each state.

Required:

(i) Estimate Philip Woods' exposure to the exchange rate risk. (6 marks)

(ii) Outline four strategies that Philip Woods could use to manage the operating exposure experienced in (d) (i) above. (4 marks)

(Total: 20 marks)

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QUESTION THREE

(a) International trade has expanded substantially in the last few decades. However, this has led to greater uncertainty for multinational companies.

Required:

Discuss three ways in which increased globalisation could adversely affect multinational firms. (6 marks)

(b) (i) Explain the term "balance of payment". (2 marks)

(ii) Analyse four factors that affect a country's financial account. (8 marks)

(c) The government of country M is willing to provide a loan of Sh.10 million at an interest rate of 5% per annum to a multinational corporation (MNC) to build a factory in country M. The loan would be paid off in equal annual instalments over a 5-year period. The market interest rate for such an investment is 14% per annum.

Required:

Before tax value of the interest subsidy. (4 marks)

(Total: 20 marks)

QUESTION FOUR

(a) The following information relates to Apex Forwarders Limited, a multinational corporation based in Switzerland:

1. The company is considering a project which involves establishing a 2-year venture in Malaysia with an initial investment of 60 million Swiss Francs (CHF).
2. The company's weighted average cost of capital (WACC) is 10%.
3. The required rate of return on this project is 12%.
4. The project is expected to generate cash flows of 24 million Malaysian Renggit (MYR) at the end of year one and 60 million MYR at the end of year two, excluding the salvage value.
5. The exchange rate is expected to be stable at 1.35 MYR/CHF.
6. All cash flows are remitted to the parent company.

Required:

(i) The break-even salvage value. (4 marks)

(ii) Advise the management on whether to undertake the project. (1 mark)

(b) Discuss three mechanisms that could be used by a multinational corporation in its attempt to repatriate blocked funds from a host country. (6 marks)

(c) Examine five objectives of international cash management. (5 marks)

(d) Suggest four basic drivers of cross-border mergers. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) (i) Evaluate five strategic objectives of international transfer pricing. (5 marks)

(ii) A multinational organisation, Demers Ltd. has two divisions, Division A and Division B, each based in a different country. Division A produces a product called "Malewa" and transfers it to Division B which operates in another country.

The domestic tax-rates for Division A and Division B are 40% and 50% respectively.

25% import duty on the price of product "Malewa" is also assessed. The full cost per unit of "Malewa" is Sh.190 while the variable cost is Sh.60.

Required:
Advise the management of Demers Ltd. on whether to use variable cost or full cost transfer price. (5 marks)

(b) Assess five functions of United Nations Conference on Trade and Development (UNCTAD). (5 marks)

(c) Faremall Group Limited. a multinational company with its head office in Kenya is considering issuing a dual-currency international bond.

The following information relates to the bond:

1. The par-value of the bond is Kenya Shillings (KES) 20 billion.
2. The tenor of the bond is 10 years with an annual coupon payment of 8%, payable in KES.
3. The bond will be redeemed in United States Dollars (USD) for a total of USD 191,764,850.30.
4. The current spot exchange rate is KES 104.2944 per USD.
5. The KES yield curve is flat at 4% and the USD curve is flat at 12%.

Required:
(i) The theoretical value of the dual-currency bond. (3 marks)

(ii) Comment on the importance of issuing a dual-currency bond. (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	.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:

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

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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KASNEB

CIFA PART III SECTION 6

INTERNATIONAL FINANCE

PILOT PAPER

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

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

QUESTION ONE

(a) A Kenyan company has agreed to sell goods to an importer in Zedland at an invoiced price of Z 150,000. Zed (Z) is the currency of Zedland. Of this amount, Z 60,000 will be payable on shipment, Z 45,000 one month after shipment and Z 45,000 three months after shipment.

The quoted foreign exchange rates Z per Kenya shilling (KSh.) at the date of shipment are as follows:

Spot	1.690	1.692
One month	1.687	1.690
Three months	1.680	1.684

The company decides to enter into appropriate forward exchange contracts through a bank in order to hedge these transactions.

Required:

(i) State two advantages of hedging as provided above. (2 marks)

(ii) Calculate the amount in Kenya shillings that the company would receive. (3 marks)

(iii) Comment with hindsight on the wisdom of hedging in this instance, assuming that the spot rates at the dates of receipt of the two instalments of Z 45,000 were as follows:

First instalment	1.69	1.69
Second instalment	1.700	1.704

(3 marks)

(b) Large companies with significant borrowings overseas often use interest rate swaps and currency swaps.

Required:

Explain how interest rates swaps may be used in the above context. (12 marks)

(Total: 20 marks)

QUESTION TWO

Gladwell is an international pharmaceutical group. It recently carried out clinical trials on a new drug which was to reduce the effects of diabetes.

The research and development costs incurred on the drug amount to Sh.160 million. In order to evaluate the market potential of the drug, an independent research firm conducted a market research at a cost of Sh.15 million. The independent researcher submitted a report indicating that the drug is likely to have a useful life of 4 years (before new advanced drugs are introduced into the market).

It is projected that in the year the drug is launched, it could be sold to authorised drug stores (chemists and hospitals) at Sh.20 per 500mg capsule.

After the first year, the price is expected to increase by 20% p.a.

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For each of the four years of the drug's life, the sales have been estimated stochastically as shown below:

Number of capsules sold	Probability
11 million	0.3
14 million	0.6
16 million	0.1

If the company decides to launch the new drug, it is possible for production to commence immediately. The equipment required to produce the drug is already owned by the company at an original cost of Sh.150 million. At the end of the drug life, the equipment could be sold for Sh.35 million.

If the company decides against the launch of the new drug, the equipment will be sold immediately for Sh.85 million as it will be of no further use to the company.

The new drug requires two hours of direct labour for each 500mg capsule produced. The cost of labour for the new drug is Sh.4 per hour. New workers will have to be recruited to produce the new drug.

At the end of the drug's life, the workers are unlikely to be offered further employment with the company and redundancy costs of Sh.10 million are expected.

The cost of ingredients for the new drug is Sh.6 per 500mg capsule.

Additional overheads arising from the production of the drug are expected to be Sh.15 million per annum.

Additional working capital of Sh.2 million will be required at the start of the production of the drug.

The drug has attracted interest of the company's main competitors and if the company decides not to produce the drug, it could sell the patent right to Drug House Ltd., its main competitor at Sh.125 million. The cost of capital is estimated to be 12%.

Required:

(a) The expected net present value of the new drug. (16 marks)

(b) State with reasons whether the company should launch the new drug. (2 marks)

(c) Discuss one strength and one weakness of the expected net present value approach for making investment decisions. (2 marks)

(Total: 20 marks)

QUESTION THREE

The government of many less developed countries have experienced problems in recent years as their debt levels have risen leading to what has been called a "global debt crisis".

Required:

(a) Explain briefly why these problems amount to a crisis. (6 marks)

(b) Discuss the approaches that have been used to overcome the problems. (8 marks)

(c) Outline the benefits to multinational business enterprises of resolving the current global debt problems. (6 marks)

(Total: 20 marks)

QUESTION FOUR

(a) In the recent past, your government has been aggressively wooing multinational companies to come and invest their resources in your country.

Required:

Analyse the key decision areas that a financial analyst would have to advise a company that is considering making direct investments in your country and discuss the risks involved. (10 marks)

(b) Your country's economy has been performing poorly in the recent past and many companies have retrenched workers while others have closed their operations. Many skilled people are having to start their own small enterprises.

Required:
As a consultant for small and medium sized firms, write a brief report explaining the various ways in which small and medium size enterprises can raise capital for investment. (10 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Suppose the Pound Sterling is bidding at £1.9724 in New York and the Euro at £1.3450 in Frankfurt. At the same time, London banks are offering the Pound Sterling at €1.4655.

Required:
Show the steps that an astute trader would follow to earn riskless profit through a triangular arbitrage. Assume that the trader begins in New York with £1000,000. (6 marks)

(b) Discuss four components of the current account in relation to balance of payment. (4 marks)

(c) In relation to foreign exchange rates regimes, explain:

(i) Fixed exchange rate or pegged exchange rate system. (1 mark)

(ii) Free floating exchange rate. (1 mark)

(iii) Managed floating exchange rate. (2 marks)

(d) Discuss three factors that affect the exchange rates. (6 marks)

(Total: 20 marks)

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STAR COLLEGE OF MANAGEMENT STUDIES

KASNEB

INTERNATIONAL FINANCE — CSIA PART III SECTION 6

FRIDAY: 29 May 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) Different theories have been developed to explain why firms become motivated to expand their businesses internationally.

In relation to the above statement, discuss the following theories:

(i) Theory of comparative advantage. (2 marks)

(ii) Imperfect markets theory. (2 marks)

(iii) Product cycle theory. (2 marks)

(b) The International Monetary Fund (IMF) operates in accordance with the provisions of its founding constitution, known as the "Articles of Agreement". The articles were originally adopted in 1944. While these articles have subsequently been amended on four occasions, in most respects, they remain as valid in defining the character and in establishing the functions and organisational structure of the Fund's Articles of Agreement. The primary purposes of the fund are set out in Article I of the Articles. These key purposes have remained essentially unchanged over the past sixty years although both their interpretation and the means of implementating them have changed as the world economy, financial markets, and their political context have changed.

Required:
In relation to the information provided above, examine three aims of the IMF as outlined in Article I of the Articles of Agreement. (6 marks)

(c) Francis Mwatela has 1,000 United States dollars (USD). He visits Forest Bank and is offered the following quotes:

1. He could buy a Euro for 14 Mexican Pesos. (MXN).
2. Forest Bank would pay him 13 Mexican Pesos for a Euro.
3. He could buy a United States dollar for 0.9 Euros.
4. The bank would pay him 0.8 Euros for a United States dollar.
5. He could buy a United States dollar for 10 Mexican Pesos.
6. The bank would pay him a Mexican Peso for a United States dollar.

Required:
Using triangular arbitrage, explain the order of transactions that you would execute to generate:

(i) Arbitrage profit. (5 marks)

(ii) Arbitrage loss. (3 marks)

(Total: 20 marks)

QUESTION TWO

(a) On 21 April 2015, the Kenyan Shilling (KES) traded at KES 93.61 against the United States dollar (USD). This is the lowest value the KES has ever traded with the USD in the last three years. The monetary policy committee of the Central Bank of Kenya (CBK) intends to reduce the value of the USD against the KES.

Required:
(i) Explain how the monetary policy committee of the Central Bank of Kenya (CBK) would use indirect intervention to achieve its goal. (2 marks)

(ii) Examine one possible adverse effect that might result from the indirect intervention explained in (a)(i) above. (2 marks)

(b) Different countries in the world generate revenue in different ways. Some countries might rely on corporate and individual income taxes to generate their revenue while other countries could depend on value added tax (VAT) or excise taxes. Since each country has its own philosophy on whom to tax and how much, it is not surprising that the tax treatment of corporations differs among countries. Since each country has a unique tax system and tax rates, multinational corporations need to recognise the various tax provisions of each country where they consider investing in foreign projects.

Required:
With reference to the above statement, discuss four tax characteristics of a country that a multinational corporation should consider when carrying out international tax assessment. (8 marks)

(c) Chandral Limited is an Indian company based in Mumbai, India. The company intends to import a multipurpose machine from Japan at a cost of 3,400 million Japanese Yen. The company can secure finance through two options:

- Obtain a loan at 18% interest per annum with quarterly rests from a local Indian bank so as to import the machine.
- An offer from a Tokyo based branch of an Indian bank extending credit of 180 days at 2% interest rate per annum against opening of an irrevocable letter of credit.

Additional information:
1. The present exchange rate is 1 Indian Rupee (INR) = 3.40 Japanese Yen (JPY).
2. The 180 days forward rate is 1 INR = 3.45 JPY.
3. The Tokyo based bank's commission charges are at 2% per annum.

Assume that credit from the Tokyo based bank is available for 180 days, and that 180 days = 6 months = two quarters.

Required:
Using appropriate computations, advise Chandral Limited on the best financing alternative. (8 marks)

(Total: 20 marks)

QUESTION THREE

(a) (i) Outline three characteristics unique to a multinational corporation that could affect its capital structure. (3 marks)

(ii) Highlight three characteristics that might differentiate the cost of capital of a multinational corporation from that of a domestic firm. (3 marks)

(b) Discuss the following methods of financing international trade:

(i) Letter of credit. (2 marks)
(ii) Banker's acceptance. (2 marks)
(iii) Factoring. (2 marks)
(iv) Countertrade. (2 marks)

(c) Assume that you work with City Bank Ltd., a multinational bank based in the United States of America. One morning, you are provided with the following information:

- Spot rate of sterling pound (£) is 1.60 United States dollars ($) per £.
- 180 day forward rate of the sterling pound (£) is $1.56 per £.
- 180 day British interest rate is 4%.
- 180 day United States interest rate is 3%.

Required:
Using appropriate calculations:

(i) Explain whether covered interest arbitrage by United States investors is feasible. (Assume that United States investors use their own funds). (3 marks)

(ii) Citing reasons, explain whether interest rate parity exists. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Highlight five lessons that could be learned from the year 2008 global financial crisis. (5 marks)

(b) Banking regulators that form the Basel committee met and agreed on a new accord, the Basel II Accord so as to correct some inconsistencies that still existed in the international financial markets.

Required:
In the context of the above statement, assess the three pillars of Basel II Accord. (6 marks)

(c) Zetech Ltd., a United States based firm, is considering to undertake a project in which it will have a computer software developed. It would sell the software to Ratec Ltd., an Australian firm, and would receive a payment of 10 million Australian dollars (AUD) at the end of one year. To obtain the software, Zetech Ltd. would have to pay a local software producer 4 million United States dollars (USD) today.

Zetech Ltd. might also receive an order for the same software from Blick Ltd. in Australia in which it would receive

AUD 4 million at the end of this year if it receives this order, and it would not incur any additional costs since it is the same software that would be created for Ratec Ltd.

The spot rate for the Australian dollar is USD 0.50. The spot rate is expected to depreciate by 8% over the next year. The 1-year forward rate of the Australian dollar is USD 0.47.

If Zetech Ltd. decides to pursue this project (have the software developed), it would hedge the expected receivables due to the order from Ratec Ltd. with a 1-year forward contract, but it would not hedge the order from Bitek Ltd. Zetech Ltd. would require a 24% rate of return in order to accept the project.

Required:

(i) The net present value (NPV) under the conditions that Zetech Ltd. receives the order from Bitek Ltd. and from Ratec Ltd., and that it receives payment from these orders in 1 year. (5 marks)

(ii) Zetech Ltd. recognises that there are some country risk conditions that could cause Ratec Ltd. to go bankrupt. Determine the net present value (NPV) of this project under the conditions that Zetech Ltd. receives both orders, but Ratec goes bankrupt and defaults on its payment to Zetech Ltd. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Multinational corporations (MNCs) commonly consider foreign direct investment (FDI) so as to improve their profitability thereby enhancing their shareholders' wealth. In most instances, multinational corporations engage in foreign direct investment since they are interested in boosting revenues, reducing cost or both.

Required:

Discuss three revenue-related motives for foreign direct investment (FDI). (6 marks)

(b) Evaluate how the following techniques could be used to optimise cash flows in international cash management:

(i) Netting technique. (3 marks)

(ii) Managing blocked funds. (3 marks)

(iii) Leading or lagging strategy. (3 marks)

(c) Assume that the 1-year forward rate is used as the forecast of the future spot rate. The Malaysian ringgit's (MYR's) spot rate is 0.28 United States dollars (USD), while its 1-year forward rate is USD 0.26. The Malaysian 1-year interest rate is 12%.

Required:

The expected effective yield on a 1-year deposit in Malaysia by a United States multinational corporation. (5 marks)

(Total: 20 marks)

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

QUESTION ONE

(a) Discuss the following organisational features of multinational banking:

(i) Correspondent banking. (2 marks)

(ii) Resident representatives. (2 marks)

(iii) Foreign branches. (2 marks)

(b) Analyse four factors that could affect a country's appeal for foreign direct investment. (8 marks)

(c) Crawley Ltd., a Kenyan company intends to invest in two foreign countries. The first country is Zuka which has introduced protectionist barriers and other restrictions on movement of funds. The government of Zuka wishes to encourage investments by Crawley Ltd. and it is prepared to relax these rules for the proposed investments.

The second country is Genaka which has no restrictions on movement of foreign exchange.

The following information is available:

	Kenya	Genaka	Zuka	World capital markets
Risk-free rate (%)	9	8	11	4
Market return (%)	12	10	15	10
Equity beta	1.2	0.8	1.4	0.8
Long term loan rate (%)	8	7	10	8
Tax rate (%)	30	28	35	30
Pre-tax cost of debt (%)	7	5	9	6

Assuming that the two investments are undertaken, Crawley's capital structure is expected to be 50% equity and 50% debt based on the book values, and 65% equity and 35% debt based on the market values.

Required:
The discount rates that should be used to evaluate the investment opportunities. (6 marks)
(Total: 20 marks)

QUESTION TWO

(a) Summarise six principles of international cash management. (6 marks)

(b) Wamu International Limited (WIL) has identified a business opportunity of importing products from Germany.

Assess three factors that the management of WIL should consider when selecting a strategy for trade financing. (6 marks)

(c) Describe three ethical issues that a multinational corporation should observe when presenting investment analysis and recommendations to its clients, prospective clients and the public. (3 marks)

(d) The one-year risk-free interest rate in Mexico and United Kingdom is 10% and 2% respectively. Assume that interest rate parity exists.

The spot rate of the Mexican Peso is £0.14.
Required:
(i) The forward rate premium. (2 marks)

(ii) The one-year forward rate of the Mexican Peso (MXN). (1 mark)

(iii) The expected change in the spot rate over the next one year based on the International Fisher Effect. (2 marks)
(Total: 20 marks)

QUESTION THREE

(a) Explain the following methods used in hedging against transaction exposure:

(i) Forward contracts. (2 marks)

(ii) Futures contracts. (2 marks)

(iii) Money market hedge. (2 marks)

(iv) Options. (2 marks)

(v) Leading and lagging. (2 marks)

(b) Patent Ltd., a company based in the United States of America (U.S.A.) plans to undertake a project in Argentina that will generate revenues of 10 million Argentina Peso (ARS) at the end of each year, for the next four years. The currency of the U.S.A. is the $.

The company will incur operating expenses of ARS 3 million per annum. The corporate tax rate charged by the Argentine government is 30%. All after-tax profits will be remitted annually to the U.S.A., which is the parent country of the company. No additional taxes are imposed. The spot rate of the ARS is presently $0.20. The ARS is expected to depreciate by 10% each year for the next four years.

The salvage value of the assets will be worth ARS 40 million in four years time after capital gains taxes are paid. The initial project investment will require $12 million, half of which will be in the form of equity from the U.S.A. parent company, while the remaining half will be generated from borrowed funds. Patent Ltd. will borrow in Argentina Pesos.

The annual interest rate on the funds borrowed is 14%, and is paid at the end of each year (with zero principal). The interest payments are deducted before determining the tax owed to the Argentine government.

The entire principal of the loan will be paid at the end of the fourth year. Patent Ltd. requires a rate of return of at least 20% on its invested equity for this project to be worthwhile.

Required:
(i) The net present value (NPV) of the project. (9 marks)

(ii) Advise Patent Ltd. on whether to undertake the project. (1 mark)
(Total: 20 marks)

QUESTION FOUR

(a) Explain the four sub-accounts of the current account with reference to the balance of payments (BOP). (8 marks)

(b) Horizon Ltd. has to make a 5 million United States dollars (U.S. $) payment in three months' time. The required amount in U.S. $ is available with Syntex Ltd. The management of Syntex Ltd. decides to invest the money for three months before making it available to Horizon Ltd.

Additional information:
1. The U.S. $ deposit rate is 9% per annum.
2. The sterling pound (£) deposit rate is 11% per annum.
3. The spot exchange rate is U.S. $ 1.82/£.
4. The three month forward rate is U.S. $ 1.80/£.

Required:
(i) Advise Syntex Ltd. on the best investment strategy for achieving maximum return based on the given information. (8 marks)

(ii) Determine the forward rate that would yield an equilibrium situation assuming that the interest rates and the spot exchange rate remain as given above. (4 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Discuss the following exchange rate regimes with reference to the International Monetary Fund (IMF) classification:

(i) Arrangements with no separate legal tender. (2 marks)

(ii) Currency board system (CBS). (2 marks)

(iii) Pegged exchange rates with horizontal bands. (2 marks)

(iv) Crawling pegs. (2 marks)

(b) The global financial crisis of 2007 to 2009 demonstrated that domestic and international financial stability cannot be taken for granted, even in the world's most developed countries.

In light of the [illegible] (IMF) has redefined and deepened its operations.

With reference to the above statement, propose three measures that the International Monetary Fund (IMF) has taken to mitigate future global financial crisis. (6 marks)

c) Discuss three mechanisms that multinational corporations (MNCs) could use to reduce their tax obligations globally. (6 marks)

(Total: 20 marks)

INTERNATIONAL FINANCE

FRIDAY: 30 May 2014. **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) Evaluate four implications of outward foreign direct investments (FDIs) from the perspective of the home (parent) country of a multinational corporation (MNC). (8 marks)

(b) Describe the following types of international arbitrage:

(i) Locational arbitrage. (1 mark)

(ii) Triangular arbitrage. (1 mark)

(iii) Covered interest arbitrage. (1 mark)

(iv) Uncovered interest arbitrage. (1 mark)

(c) David Githaiga is a forex trader who specialises in cross-rate arbitrage. One morning he noticed the following quotes:

Swiss franc (CHF) /United States dollar (USD) = CHF 1.5971/USD
Australian dollar (AUD)/United States dollar = AUD 1.8215/USD
Australian dollar /Swiss franc = AUD 1.1440/CHF

Additional information:
1. There are no transaction costs.
2. David Githaiga has USD 1,000,000 available for arbitrage.

Required:
Based on triangular arbitrage strategy, calculate the arbitrage profit in U.S. dollars, clearly outlining the steps David Githaiga would take to earn this profit. (8 marks)

(Total: 20 marks)

QUESTION TWO

(a) Examine five types of ethical dilemmas that managers of multinational corporations (MNCs) could face. (10 marks)

(b) Argue four cases against the use of tax incentives offered by the host country of a multinational corporation. (4 marks)

(c) In relation to international trade financing, explain the term "forfaiting transaction". (2 marks)

(d) The time from acceptance to maturity on a Sh.1,000,000 banker's acceptance is 120 days. The importer's bank acceptance commission is 1.75% and the market rate for the 120 day bankers acceptance is 5.75%. Assume that one year has 360 days.

Required:
(i) The amount the exporter would receive if he holds the banker's acceptance until maturity. (2 marks)

(ii) The amount the exporter would receive if he discounts the banker's acceptance with the importer's bank. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) The overall capital structure of a parent company is essentially a combination of all its subsidiaries' capital structures. The capital structure of a multinational corporation is dependent not only on the characteristics that are distinctive to each of the multinational corporations but also on the characteristics that are distinctive to each of the host country.

Required:
With reference to the above statement, discuss five factors that help a multinational corporation (MNC) in its choice of a capital structure. (5 marks)

(b) The late 2000s global financial crisis or the so called credit crunch is considered by many economists as the worst financial crisis since the great depression of the 1930's. It resulted in the collapse of large financial institutions, bail out of banks by national governments around the world, foreclosures and prolonged unemployment.

Required:
With reference to the above statement, summarise five main causes of the global financial crisis experienced in the late 2000s. (5 marks)

(c) Patkam Ltd., an Indian based company has two subsidiaries, one in the United States (US) and the other one in the United Kingdom (UK). The whole forecast surplus funds for the next 30 days are as given below:

US Subsidiary; United States dollars (USD) 12 million.
UK Subsidiary; Sterling pound (£) 6 million.

Additional information:
1. Exchange rates:

	$/Rupee (Rs)	£/Rs
Spot	0.0243	0.0148
30 days forward	0.0245	0.0150

2. Borrowing/deposit rates per annum (simple interest rates):

(Rs)	8.4%/7.5%
$	1.6%/1.5%
£	4.0%/3.8%

3. The Indian operation is forecasting a cash deficit of Rs.400 million.
4. Assume that one year has 360 days.

Required:
The cash balance in Indian Rupees at the end of 30 days period for Patkam Ltd. and each of the two subsidiaries under the following scenarios (ignore transaction costs and taxes).

(i) Each company invests/finances its own cash balances/deficits in local currency independently. (5 marks)

(ii) Cash balances are pooled immediately in India and the net balances are invested/borrowed for 30 days period. (5 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Evaluate four negative impacts of multinational corporations (MNCs) on the host countries. (8 marks)

(b) Kakuma Ltd. is a Kenyan firm that intends to place an order to buy machinery from an american company. As per the agreement, Kakuma Ltd. will be expected to pay the american company 200,000 U.S. dollars (USD) after 180 days. Kakuma Ltd. is considering four alternative hedging approaches; forward hedge, money market hedge, option hedge or remain unhedged.

As a financial consultant hired by Kakuma Ltd., you collect and develop the following data/information as desired by the company to determine the most appropriate approach for hedging.

1. The spot rate of U.S. dollars as of today is Ksh.47.00/USD.
2. The 180-day forward rate of dollars as of today is Ksh.47.50/USD.
3. Interest rates are as follows:

	Kenya (%)	U.S. (%)
180-day deposit rate (per annum)	7.5	3.0
180-day borrowing rate (per annum)	8.0	4.0

4. Future spot rate in 180 days as estimated by the consultant is Ksh.47.75 /USD.
5. A call option on the USD which expires in 180 days has an exercise price of Ksh.47/USD and a premium of Ksh.0.52/USD.
6. A put option on the U.S. dollar, which expires in 180 days has an exercise price of Ksh.47.50 and a premium of Ksh.0.4/USD.
7. One year is assumed to have 360 days.

Required:
Carry out a comparative analysis using the following hedging techniques.

(i) Forward hedge. (2 marks)

(ii) Money market hedge. (3 marks)

(iii) Option hedge. (3 marks)

(iv) Remain unhedged. (2 marks)

(c) Advise Kakuma Ltd. on the best hedging technique to adopt based on your analysis in (b) above. (2 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Discuss four reasons why the central bank in your country would prefer the fixed exchange rate system to the floating exchange rate system. (8 marks)

(b) A United States multinational corporation intends to make a capital investment in Russia. The estimated project cost is 650 million Russian Ruble (Rub), with a salvage value of Rub 50 million after 5 years. The pre-tax operating cash flows are expected to be Rub 300 million per year. The company wishes to finance the project with the following sources of funds.

- Retained earnings: USD 5 million.
- Five-year term loan in Russia at 15%: Rub 200 million.
- Five-year term loan in US dollars at 10%: USD 5 million.

The corporate tax rate in Russia is 35%, while that in the United States is 30%. The Russian government permits overseas companies to remit 50% of each year's pre-tax, but after-interest, accounting profit back to the parent firm. The country can also invest blocked funds in Russia at 6% in government securities. Such funds can be repatriated at the end of the project's life. The remittances from the project are not expected to attract any tax in the United States.

The current spot exchange rate is USD/Rub 45.

The Russian Ruble is expected to depreciate against the U.S. dollar by 5% per annum.

The project has an asset beta of 1.50. The beta of debt is 1.20. In the United States, the risk free rate of return is 4%, and the return on the market index is 14%.

Required:
Assess the viability of the project using the adjusted present value (APV) approach. (12 marks)
(Total: 20 marks)

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OF MANAGEMENT STUDIES

KASNEB

INTERNATIONAL FINANCE

CSIA PART III SECTION 6

Time Allowed: 3 hours.

FRIDAY: 6 December 2013.

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

QUESTION ONE

(a) Discuss three internal hedging techniques that an organisation could employ to hedge against currency risk. (6 marks)

(b) Tripple A Ltd., a company based in Kenya, imports wrist watches from Rwanda. The company has a contract to purchase 30,000 wrist watches at a unit price of 18 Rwandese Francs, RWF. Three month's credit is allowed before payment is due.

Tripple A Ltd. currently has no surplus cash, but can borrow short term at 2 per cent above bank rate or invest short-term at 2 per cent below bank rate in either Kenya or Rwanda.

The following information is provided:

	RWF/KSh.
Spot exchange rate	8.81 - 8.87
1 month forward	2.5% - 1.5% premium
3 month forward	4.5% - 3.5% premium

(The premium relates to Rwandese francs)

Current bank base rates

Country	Rate
Rwanda	6% per annum
Kenya	10% per annum

Required:

(i) Using suitable computations, illustrate three policies that Tripple A Ltd. might adopt with respect to the foreign exchange exposure of this transaction.

(Assume that the interest rates will not change during the next three months). (9 marks)

(ii) Recommend the policy that the company should adopt. (1 mark)

(c) Highlight four factors that could influence the transfer pricing decisions by a multinational corporation. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Distinguish between the following terms:

(i) "Sterilised foreign exchange intervention" and "unsterilised foreign exchange intervention". (2 marks)

(ii) "Fixed exchange rate" and "floating exchange rate". (2 marks)

(b) Describe two ways in which the central bank could intervene to correct foreign exchange rates. (4 marks)

(c) Summarise six methods that the government in your country could adopt to prevent falling into debt crisis. (6 marks)

(d) A United Kingdom investor holds £500,000 which he intends to invest in Morocco.

Additional information:

1. Current spot exchange rate of the Moroccan Dirham is £0.06.
2. 60-day forward rate of the Moroccan Dirham is £0.05.
3. 60-day interest rate in the United Kingdom is 1 per cent.
4. 60-day interest rate in Morocco is 2 per cent.

Required:

(i) The yield to the United Kingdom investor who engages in covered interest arbitrage. (4 marks)

(ii) Explain whether covered interest arbitrage is possible for a Moroccan investor in this case. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Explain the following terms as used in the foreign exchange forecasting:

(i) Interest rate parity. (2 marks)

(ii) Purchasing power parity (PPP). (2 marks)

(iii) International Fisher effect (IFE). (2 marks)

(b) Thomas Dickson currently holds $100,000 (USD) but does not believe that the International Fisher Effect (IFE) applies.

Additional information:

1. The current one-year interest rate in Europe is 5 per cent while the one-year interest rate in the United States is 3 per cent.
2. Thomas Dickson converts $100,000 (USD) to Euros and invests the Euros in Germany. One year later, he converts the Euros back to dollars.
3. The current spot exchange rate is $1.10 (USD) per Euro (€).

Required:

(i) According to the International Fisher Effect (IFE), calculate the spot rate of the Euro in one year. (2 marks)

(ii) If the spot rate of the Euro in one year is $1.06, calculate Thomas Dickson's percentage return from the strategy. (4 marks)

(iii) If the spot rate of the Euro in one year is $1.08, calculate Thomas Dickson's percentages return from the strategy. (4 marks)

(iv) Determine what the spot rate of the Euro must be in one year, for Thomas Dickson's strategy to be successful. (1 mark)

(c) Outline three assumptions of the current account monetary model. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Describe four considerations to be taken into account when determining the strategy for financing international trade. (4 marks)

(b) (i) Evaluate three challenges that managers of multinational corporations might face in evaluating international investments using the net present value (NPV) method. (6 marks)

(ii) Zemtex Ltd., a British company has just constructed a manufacturing plant in Nairobi at a cost of 9 million Kenya shillings.

Additional information:

1. Zemtex Ltd. intends to operate the plant for three years.
2. The company projects cash inflows of Kenya shillings 3 million, 3 million and 2 million for the next three years of operation respectively.
3. The operating cash flows will begin in the year 2014 and will be remitted back to the parent company at the end of each year.
4. The plant will be disposed of at the end of third year for Kenya shillings 5 million.
5. The required rate of return for the company is 17 per cent.
6. The current exchange rate for United Kingdom Pound (£) is Kenya shillings 120 per Pound. The shilling is expected to depreciate by 5 per cent per year.

Required:

Using the net present value (NPV) method, advise Zemtex Ltd.'s management on whether or not to undertake the project. (6 marks)

(c) Highlight four causes of rapid growth of foreign direct investments (FDI) in the developing and emerging economies of the world. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Analyse four modes of payment that could be used by a multinational corporation. (4 marks)

(b) Discuss four factors that might have led to success of Euro currency in Europe. (8 marks)

(c) [illegible]

STAR COLLEGE OF MANAGEMENT STUDIES

KASNEB

INTERNATIONAL FINANCE

CSIA PART III SECTION 6

MONDAY: 10 June 2013.

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 methods used by the revenue authority in your country to determine whether a transfer price undertaken by a multinational is reasonable. (3 marks)

(b) (i) Explain the term "Credit default swap". (2 marks)

(ii) Discuss three features of credit default swaps. (6 marks)

(c) Exporters Ltd., a Kenyan company, is due to receive 500,000 Northland dollars in 6 months time for goods supplied. The company decides to hedge its currency exposure by using the forward market. The short-term interest rate in Kenya is 12% and the equivalent rate in Northland is 15%. The spot exchange rate is 2.5 Northland dollars to the Kenya shilling.

Required:

The gain or loss due to hedging if at the end of the six months, the Kenya shilling in relation to the Northland dollar had:

(i) Gained 4%. (3 marks)

(ii) Lost 2%. (3 marks)

(iii) Remained stable. (3 marks)

(Total: 20 marks)

QUESTION TWO

(a) Discuss the rationale behind interest rate parity analysis of forward rates. (6 marks)

(b) Mohammed Abdul is a portfolio manager for Bob Ltd. whose reporting currency is the United States Dollar (USD). He holds a portfolio of French shares currently worth 10 million Euros (€). In order to hedge against a potential depreciation of the Euro, the portfolio manager proposes to sell December futures contracts on the Euros that currently trade at 1USD/€ and expire in two months.

The spot exchange rate is currently USD1.1/€. A month later, the value of the French portfolio is 10,050,000 Euros and the spot exchange rate is USD1.05/€ while the future exchange rate is USD 0.95/€.

Required:

(i) Evaluate the effectiveness of the hedge by comparing the fully hedged portfolio return with the unhedged portfolio return. (8 marks)

(ii) Calculate the return on the portfolio, assuming a 35% hedge ratio. (6 marks)

(Total: 20 marks)

QUESTION THREE

(a) Discuss three problems encountered when using capital asset pricing model (CAPM) and arbitrage pricing theory (APT) in predicting expected rates of return in an international capital market equilibrium. (6 marks)

(b) Barways Bank Limited expects that the French franc (FF) will appreciate against the United States Dollar (USD) from its spot rate of 14USD to 15USD in 30 days. The following interbank lending and borrowing rates are provided:

	Lending rates	Borrowing rates
United States Dollars	8.0%	8.3%
French Franc	8.5%	8.7%

Assume that Barways Bank Limited has a borrowing capacity of 10 million USDs in the interbank market.

Required:

(i) The capitalisation of Barways Bank Limited on its expectations without using deposited funds. (6 marks)

(ii) Estimate the arbitrage profit that could be generated from this strategy. (4 marks)

(c) Two parties enter into a three-year swap agreement to exchange the LIBOR for a 7% fixed rate on 20 million United States Dollars (USD) of notional principal. LIBOR in the three years turns out to be 8%, 7% and 9% respectively.

Required:

Evaluate the cash flows that will be exchanged between the two counter parties. (4 marks)

(Total: 20 marks)

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QUESTION FOUR

(a) Differentiate between "tax neutrality" and "tax equity". (4 marks)

(b) A Ugandan company issues a bond with a face value of USh.1.2 billion and a coupon rate of 5.25%. The company decides to use a swap to convert this bond into a Kenya shilling denominated bond.

The current exchange rate is USh.20/KSh. The fixed rate on Kenya shilling denominated bond is 6% and the fixed rate on Uganda shilling denominated swap is 5%. All payments are made annually.

Required:

(i) Interest cash flows at each interest payment date. (4 marks)

(ii) Principal cash flows at the maturity of the bond. (3 marks)

(c) James Wanjohi is a portfolio manager for an investment management firm based in country D. He has gathered the following data for country D and country E. Country D uses DC currency and country E uses FC currency.

Additional information:

- Country D's expected inflation rate over the next year is 4.75%.
- Country E's expected inflation rate over the next year is 1.25%.
- Current exchange rate (DC/FC) is 1.724.
- The one year yield for country D's risk-free bond is 6.50%.
- The one year yield for country E's risk-free bond is 2.35%.
- The ratio of country D price level to Country E price level is 1.5:1.

Required:

(i) Assuming that inflation is as predicted and the real exchange rate remains constant, calculate the expected nominal exchange rate (DC/FC) at the end of one year. (3 marks)

(ii) Assuming that inflation is as predicted and the actual exchange rate at the end of the year is DC1.587 to FC1.0, calculate the ex post DC return on a one year country E bond. (3 marks)

(iii) The foreign currency risk premium if the expected exchange rate at the end of one year is DC1.820 to FC1.0. (3 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Explain five factors that prevent international capital flows from taking advantage of relative mispricing among countries. (10 marks)

(b) A Tanzanian investor is considering investments in the Kenyan (stocks A and B) and Ugandan (stocks C and D) stock markets. The world market risk premium is 6%. The currency risk premium on the Uganda shilling is 1.25% while the currency risk premium on the Kenya shilling is 2%. The interest rate on one year risk free bonds is 3.75% in Tanzania.

Additional information relating to the above investment is provided below:

Stock	A	B	C	D
Country	Kenya	Kenya	Uganda	Uganda
β_w (world beta)	1	0.90	1	1.5
YKsh. (currency exposure, Kshilling)	1	0.80	-0.25	-1.0
YKsh. (currency exposure, Ushilling)	-0.25	0.75	1.0	-0.5

Required:

(i) The expected return for each of the stocks, using the Tanzania shilling as the base currency. (6 marks)

(ii) Difference in the expected returns of the four stocks in terms of world beta, YKsh (currency exposure, Kenya shilling) and YUsh (currency exposure, Uganda shilling). (4 marks)

(Total: 20 marks)

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KASNEB

CSIA PART III SECTION 6 CI62

INTERNATIONAL FINANCE

FRIDAY: 7 December 2012. 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) There has been considerable momentum to reduce or remove trade barriers in an effort to achieve "free trade". Tom Roy, a disgruntled executive of an exporting firm stated, "Free trade is not conceivable, we are always at the mercy of the exchange rate. Any country can use this mechanism to impose trade barriers".

Required:

(i) Interpret Tom Roy's statement. (4 marks)

(ii) Examine six methods that could be used by trading countries to eliminate trade restrictions. (6 marks)

(b) Summarise four characteristics of the Euro currency segment. (4 marks)

(c) The following information relates to the Republic of Zungaland for the year ended 31 December 2011:

	Sh."billions"
Export of goods	5,000
Import of goods	3,000
Receipts from interest and dividends	1,500
Payments for interest and dividends	1,000
Gifts received from abroad	800
Gifts to foreign countries	1,200

Required:

A current account for the year ended 31 December 2011. (6 marks)

(Total: 20 marks)

QUESTION TWO

(a) Great Oil Ltd. is a Kenyan company which deals in oil exploration in the region. The company is considering issuing a foreign bond worth 500 million United States dollars (USD) to finance its oil exploration programme along the Indian Ocean. The loan will be repaid in 10 years time. The Kenyan currency is Kenya shillings (Ksh.).

Required:

(i) Explain why it is advisable for the company to issue a bond denominated in a currency different from its home currency. (2 marks)

(ii) Analyse the risk involved in issuing such a bond. (2 marks)

(b) Describe four methods that could be used by developing countries to reduce the inflationary pressure of deficit financing. (4 marks)

(c) A call or put option expires in three months time and has an exercise price of Sh.40. The underlying stock is worth Sh.42 today. In three months time, the stock price may increase by Sh.7 or decrease by Sh.6. The risk free rate is 2% per annum.

Required:

Using the binomial model determine:

(i) The value of the call option. (5 marks)

(ii) The value of the put option. (5 marks)

(iii) Given the call and put prices calculated in (c) (i) and (c) (ii) above, test whether put call-parity holds. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) Assume that United Kingdom invests heavily in government and corporate securities of Kenya. In addition, residents of Kenya invest heavily in the United Kingdom. Approximately 10 billion Sterling Pounds (£) worth of investment transactions occur between these two countries each year. The total value of trade transactions per year is about 8 million Sterling Pounds (£). This information is expected to hold in the foreseeable future.

Assuming that you are the international cash manager of a firm that exports goods to Kenya, your job requires you to forecast the value of Kenya's currency, Kenya shilling, with respect to the Sterling Pound.

Required:

Explain how each of the following conditions would affect the value of the Kenya shilling holding other things constant:

(i) United Kingdom's inflation has suddenly increased substantially, while Kenya's inflation remains low. (2 marks)

(ii) United Kingdom's interest rates have increased substantially while Kenya's interest rates remain low. Investors of both countries are attracted to high interest rates. (2 marks)

(iii) United Kingdom's income level increased substantially, while Kenya's income level has remained constant. (2 marks)

(iv) United Kingdom is expected to impose a high tariff on goods imported from Kenya. (1 mark)

(v) Combine all expected impacts in (a) (i) to (a) (iv) above to develop an overall forecast. (3 marks)

(b) Xeep Ltd. is a multinational company based in Tundaland. It has subsidiary companies in Bundaland and in the Zandaland.

Additional information:

1. The Zandaland subsidiary manufactures electronic parts which are sold to the Bundaland subsidiary at Tsh.8,400 each from where they are assembled. In the year ended 31 December 2011, the Zandaland subsidiary sold 400,000 units to the Bundaland subsidiary at a profit of Tsh.1,600 per unit.
2. The Bundaland subsidiary incurred further costs of Tsh.8,000 per unit and sold the finished product for Tsh.21,000.
3. All the profits from the foreign subsidiaries are remitted to the parent company as dividends.
4. Double taxation treaties exist between Tundaland, Bundaland and Zandaland which allows companies to offset foreign tax liabilities against their domestic tax liability.

The following are the tax rates amongst the three countries:

	Zandaland	Tundaland	Bundaland
Tax on profits	20%	30%	40%
Withholding tax on dividends	-	12%	10%

Required:

The total tax paid by Xeep Ltd. for the year ended 31 December 2011. (10 marks)

(Total: 20 marks)

QUESTION FOUR

(a) The result of abolishing barriers to entry in the various segments of the financial services industries has led to the creation of financial conglomerates in the banking, securities and insurance industries.

In relation to the above statement, evaluate three effects of conglomerates on financial services industries. (6 marks)

(b) The finance director of Saffex Ltd. has requested you to construct an optimal international portfolio using the United States (US) and United Kingdom (UK) stock markets indices. He has availed the following data, in percentages, per month for the two stocks:

$\bar{R}_{US}$	=	2.24	Where: $\bar{R}_{US}$	= Return on US stock
$\bar{R}_{UK}$	=	2.50	$\bar{R}_{UK}$	= Return on UK stock
δ^2_{US}	=	20.62	δ^2_{US}	= Variance on US stock
δ^2_{UK}	=	30.86	δ^2_{UK}	= Variance on UK stock
$\delta^2_{US,UK}$	=	15.50	$\delta^2_{US,UK}$	= Standard deviation on US and UK.

The monthly risk free rate is 0.75%.

Required:

(i) The weights of the international portfolio. (4 marks)

(ii) The expected return of the optimal portfolio. (2 marks)

(iii) The risk of the optimal portfolio. (2 marks)

(c) Bluemark Ltd., a company established in Kenya, is considering whether to establish a subsidiary in South Africa at an initial investment of Rand (R)30,000,000. The subsidiary will run for five years.

The following are the expected net cash inflows from the subsidiary:

Year	Cash flows Rand "000"
1	13,600
2	12,620
3	10,500
4	8,400
5	5,600

Additional information:

1. The withholding tax is 10 per cent on remitted profits.
2. The exchange rate is expected to remain constant at KSh.15/Rand.
3. At the end of the five years, the South African government will buy the plant for R24,000,000. This amount will be repatriated free of withholding tax.

The company's cost of capital is 18%.

Required:
Using the net present value (NPV) approach, advise Bluemark Ltd. on whether to establish a subsidiary in South Africa.
(6 marks)
(Total: 20 marks)

QUESTION FIVE

(a) "Sometimes hedging is more costly than not hedging, yet most companies prefer to hedge their long term financial exposure". Critique this statement.
(3 marks)

(b) The following exchange and interest rates were quoted on the Nasdaq Financial Services Screen:

90-day United Kingdom interest rate	8%
90-day United States interest rate	9%
90-day forward rate of United States dollar (USD)	£0.65
Spot rate of United States dollar (USD)	£0.64

Delox Ltd., a United Kingdom company, has invoiced Bendrock Ltd. of United States and is meant to receive 400,000 United States dollars (USD) in 180 days.

Required:
Determine the amount to be received by Delox Ltd. using:

(i) Forward contract hedge. (2 marks)
(ii) Money market hedge. (4 marks)
(iii) Advise Delox Ltd. on the most appropriate hedge based on your calculation in (b) (i) and (b) (ii) above. (1 mark)

(c) Describe five techniques that a multinational corporation (MNC) might employ to assess country risk before investing in a given country.
(5 marks)

(d) Leadways Ltd. has just issued a fixed rate debt at 10%. The management is considering converting this debt into a floating rate debt and has entered into an interest rate swap with a variable rate payment of LIBOR plus 1% in exchange for payments of 10%.
The interest rates are applied to an amount that represents the principal from its current debt issue in order to determine the interest payments due at the end of each year for the next three years. Leadways Ltd. expects that the LIBOR will be 9% at the end of the first year, 8.5% at the end of the second year and 7% at the end of the third year.

Required:
The financing rate that Leadways Ltd. expects to pay on its debt after considering the effect of the interest rate swap.
(5 marks)
(Total: 20 marks)

STAR COLLEGE OF MANAGEMENT STUDIES

KASNEB

CSIA PART III SECTION 6

INTERNATIONAL FINANCE

MONDAY: 4 June 2012. 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) Outline five objectives of the International Monetary Fund (IMF). (5 marks)

(b) Explain five ways in which increased globalisation might adversely affect the multinational companies. (5 marks)

(c) Counterparties A and B both require USD 100 million for 5 years. To reduce their financing risks, counterparty A would like to borrow at a fixed rate whereas counterparty B would prefer to borrow at a floating rate. Counterparty A is a company with a BBB credit rating and counterparty B is an AAA rated bank.

The cost to each party of accessing either the fixed rate or the floating rate market for a 5-year debt issue is as follows:

Borrower	Fixed-rate available	Floating-rate available
Counterparty A: BBB rated	9.5%	6-month LIBOR + 0.5%
Counterparty B: AAA rated	7.0%	6-month LIBOR
Difference	1.5%	0.5%

Required:
Formulate a classic swap structure. (10 marks)
(Total: 20 marks)

QUESTION TWO

(a) Business managers and investors need balance of payment (BOP) data to anticipate changes in a host country whose economic policies might be driven by balance of payment events.

In light of the above statement, examine three specific signals that a country's balance of payment data could provide. (6 marks)

(b) Assume that the interest rate in New Zealand is 9%. A United Kingdom firm plans to borrow New Zealand dollars, convert them to United Kingdom pounds (£) and repay the loan in one year.

Required:
(i) The effective financing rate if the New Zealand dollar depreciates by 6 per cent. (3 marks)

(ii) The effective financing rate if the New Zealand dollar appreciates by 3 per cent. (3 marks)

(iii) Assuming a 50 per cent chance of either scenario occurring, determine the expected value of the effective financing rate. (2 marks)

(c) Assume that the Japanese one year interest rate is 5 per cent while the United Kingdom one year interest rate is 8 per cent.

Required:
The percentage change in the Japanese Yen that would cause a United Kingdom firm borrowing Yen to incur the same effective financing rate as it would if it borrowed pounds. (6 marks)
(Total: 20 marks)

QUESTION THREE

(a) "Many international transactions require international trade credit facilitated by commercial banks".

Justify the above statement. (6 marks)

(b) Evaluate five techniques that could be used by multinational corporations to manage their operating risk exposures. (10 marks)

(c) The Sterling pound (£) is bid at United States dollars (USD) 1.9724 in New York and Euro (€) is offered at USD 1.3450 in Frankfurt. At the same time, London banks are offering the Sterling pound (£) at € 1.4655.

Required:
Show how an astute trader holding USD 1,000,000 could profit from a triangular arbitrage. (4 marks)
(Total: 20 marks)

QUESTION FOUR

(a) Analyse three benefits that a multinational corporation could derive from investing in Euro bond markets. (6 marks)

(b) Describe how multinational banks could manage the following risks:

(i) Price risks. (2 marks)

(ii) Transaction risks. (2 marks)

(iii) Compliance risks. (2 marks)

(iv) Liquidity risks. (2 marks)

(c) An investor holds a European call option on a stock when there are ex-dividend dates in two months and five months time. The dividend on each ex-dividend date is expected to be Sh.0.50. The current share price is Sh.40, the exercise price is Sh.40, the stock price volatility is 30% per annum, the risk-free rate of interest is 9% per annum and the time to maturity is six months.

Required:
The call price using the Black and Scholes option pricing model. (6 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Kwety Kazina Limited is a domestic company while Zimro Limited is a foreign company. Both companies hold assets with an assumed standard deviation of 16 per cent and 18 per cent respectively, with a correlation coefficient of 0.4. The risk-free rate is 5 per cent in both countries.

The expected returns of the domestic and foreign assets are both 12 per cent.

Required:
Calculate the Sharpe ratio for:

(i) The domestic asset. (2 marks)

(ii) The foreign asset. (2 marks)

(iii) Internationally diversified portfolio equally invested in the domestic and foreign assets.

Comment on your answer. (4 marks)

(b) Mongam Limited, a company based in Kenya is considering establishing a new subsidiary in the United States to take advantage of the new market.

Additional information:
1. The total cost of the subsidiary is estimated to be United States dollars (USD) 4,800,000. Non-current assets constitute USD 4,000,000 while the balance will be the working capital.
2. The subsidiary is expected to generate annual sales of USD 3,200,000 and to incur cash expenditure of USD 2,000,000 annually.
3. The company has a planning horizon of four years at the end of which it expects to realise the non-current assets of the subsidiary for USD 1,600,000.
4. It is the company's policy to remit maximum funds possible to the parent company at the end of each year.
5. Tax is payable at the rate of 35% in the United States in arrears. A double taxation treaty exists between Kenya and the United States.
6. Tax allowable depreciation is at 25% on a straight line basis on all non-current assets.
7. The company's cost of capital is 16%.

Required:
Using the net present value (NPV) approach, advise the management of Mongam Limited whether to invest in the subsidiary. (8 marks)

(c) An ungeared United Kingdom firm, with a Beta of 1.4, is considering to undertake a foreign project by investing in an emerging country that has no stock exchange. The economy of the emerging country has a weak correlation coefficient of 0.4 with the United Kingdom. Due to operating gearing, the foreign project is 25 per cent riskier than the United Kingdom parent company.

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The risk-free rate is 5 per cent and the expected overall return on the United Kingdom stock market is 11 per cent per annum.

Required:
The return that the United Kingdom firm should seek on the foreign project. (4 marks)
(Total: 20 marks)

KASNEB | CSIA PART III SECTION 6 CI62
INTERNATIONAL FINANCE

FRIDAY: 2 December 2011.

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) Summarise four assumptions underlying the Binomial Option Pricing Model. (4 marks)

(b) Discuss four indicators that could be used to assess a country's ability to generate sufficient foreign exchange to service its liabilities. (8 marks)

(c) Morextu Dealers Ltd., a company based in Kenya, specialises in importation of motor cycles from the United States of America. On 1 September 2011, the company imported a consignment worth United States dollars (USD) 2,000,000. The company was granted three months credit by the supplier payable on 1 December 2011.

The spot rates on 1 September 2011 and 1 December 2011 were as follows:

	USD/Ksh.
1 September 2011	0.0065
1 December 2011	0.0060

In December 2011, shilling futures are forecasted to trade at USD 0.00675/Ksh. (contract size Ksh. 2,388,000) as at 1 September 2011.

Required:

(i) Show how Marextu Dealers Ltd. could have used a futures contract as a hedging tool indicating any hedging profit or loss. (6 marks)

(ii) The number of futures contracts that Morextu Dealers Ltd. could have purchased if the contract size was Sh.4 million. (2 marks)
(Total: 20 marks)

QUESTION TWO

(a) Distinguish between "interest rate swap" and "currency swap". (4 marks)

(b) An American firm, Dow Chemicals Ltd., is considering hedging some of its Euro exposure by borrowing in Euros. At the same time a French manufacturer, Deltex Ltd., is seeking dollars to finance additional investment in the United States of America (USA) market.

Both companies want the equivalent of United States dollars (USD) 200 million in fixed-rate financing for 10 years. Dow Chemicals Ltd. can issue dollar denominated debt at a coupon rate of 7.5% or Euro denominated debt at a coupon rate of 8.25%. Equivalent rates for Deltex Ltd. are 7.7% in dollars and 8.1% in Euros. Both companies have similar credit ratings.

The current spot rate is € 0.75/$.

Required:
Show how Dow Chemicals Ltd. would use a fixed rate financing by swapping with Deltex Ltd. (10 marks)

(c) Explain the following terms as used in international finance:

(i) Currency boards. (2 marks)

(ii) Dollarisation. (2 marks)

(iii) Sterilised intervention. (2 marks)
(Total: 20 marks)

QUESTION THREE

(a) Outline five characteristics of a multinational corporation that might influence its cost of capital to differ from that of a domestic firm. (5 marks)

(b) Highlight five instruments that could be used to source equity in global markets. (5 marks)

(c) Assume that the East African Community (EAC) monetary union has now been operationalised and the Shilling ha been chosen as the unit of currency. The EAC is evaluating its trading partners. Among them is South Africa, whos unit of currency is the Rand. Assume that the EAC risk-free interest rate on bonds with one year to maturity is 14.78% and that the South African risk free interest rate on one year bonds is 13.15%. The current exchange rate is Rand 0.9 t the Shilling. This has been agreed upon after a thorough evaluation of the two monetary systems. An investor living i South Africa is currently evaluating the exchange rate movements within these two regions.

Required:

(i) Calculate the one year forward exchange rate. (4 marks)

(ii) Assess whether the Shilling is trading at forward premium or discount. (2 marks)

(iii) Evaluate whether the answer in (c) (ii) above is consistent with interest rate parity. Justify your answer. (4 marks)
(Total: 20 marks)

QUESTION FOUR

(a) (i) Outline five causes of international debt crisis in the world. (5 marks)

(ii) Highlight five measures that could be put in place to address debt crisis. (5 marks)

(b) Rehema Justo is a foreign exchange dealer in an international bank. She has United States dollars (USD) 10,000,000 or their Swiss Francs (SFr) equivalent for a short term money market investment. Rehema Justo is undecided as to whether she should invest in USD for three months or make a covered interest arbitrage investment in SFr.

The following rates are applicable:

Spot exchange rate	SFr.1.2810/ USD
3-month forward rate	SFr.1.2740/ USD
3-month US interest rate	4.800% per annum
3-month Swiss interest rate	3.200% per annum

Required:

(i) Advise Rehema Justo on which of the two investment alternatives to pursue. Justify your answer. (8 marks)

(ii) Determine her rate of return on the investment selected in (b) (i) above. (2 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Explain two roles of an international portfolio manager. (4 marks)

(b) Describe three ways through which a multinational corporation could use transfer pricing strategies to reduce its tax liabilities. (6 marks)

(c) Zelon Limited, a multinational company based in the United States of America (USA) is considering alternative ways of raising funds for a project in Argentina during the year 2012.

The following information is available:

US risk free rate	6%
Argentine risk free rate	10%
Risk premium on dollar-denominated debt provided by US creditors	3%
Risk premium on Argentine peso-denominated debt provided by Argentine creditors	5%
Beta of project	1.5
Expected US market return	14%
US corporate tax rate	30%
Argentine corporate tax rate	40%

Required:

(i) Cost of dollar-denominated debt. (2 marks)

(ii) Cost of Argentine peso-denominated debt. (2 marks)

(iii) Cost of dollar denominated equity. (2 marks)

(d) Summarise four advantages derived by exporters from using a letter of credit. (4 marks)

KASNEB

CSIA PART III SECTION 6 CI62

INTERNATIONAL FINANCE

TUESDAY: 7 June 2011. 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) Outline five factors that affect the price of an option. (5 marks)

(b) Summarise five assumptions of the Black-Scholes model of option pricing. (5 marks)

(c) (i) With the aid of an appropriate example, analyse the concept of comparative advantage. (5 marks)

(ii) Discuss the limitations of the theory of comparative advantage. (5 marks)

(Total: 20 marks)

QUESTION TWO

(a) With the aid of a well-labelled diagram, explain the concept of "overshooting" as used in exchange rate movements. (8 marks)

(b) Sure Motors Limited, a company based in Kenya, deals in the importation of vehicles from Japan for sale. The company has outsourced the shipping of the vehicles to Super Lift Limited, a company which deals and bills in Euros (€). In order to prevent losses in foreign currency operations, Sure Motors Limited hedges all its operations in hard currencies.

Currently, Sure Motors Limited is holding a portfolio of United States investment worth US Dollars ($)10,000,000. The Securities and Investment Analyst of the company has advised the management to engage in a dynamic hedge of the $/€ exchange risk by buying Euro calls. On 1 June 2011, an August 2011 100 Euro call is quoted at $0.02/€. This gives Sure Motors Limited the right to buy one Euro for one US Dollar in August 2011. The delta of the Euro call is 0.5 and the spot exchange rate is $1/€. The size of the option contract is €125,000.

Required:

(i) The Euro calls Sure Motors Limited should buy in order to obtain an ideal dynamic hedge. (3 marks)

(ii) Assume that on 4 June 2011, the value of the US Dollar dropped to $1.1/€. The worth of the Euro call as at that date was $0.11 and its delta was 0.9.

Evaluate the strategy of the Securities and Investment Analyst of Sure Motors Limited (in Euros), given that the worth of the portfolio investment remained unchanged. (6 marks)

(iii) Advise Sure Motors Limited on what could be done to rebalance the hedge. (3 marks)

(Total: 20 marks)

QUESTION THREE

(a) Explain six benefits that would accrue to a company from cross border listing of its shares. (6 marks)

(b) The data below relates to two multinational companies, AAA Limited and ZZZ Limited:

	AAA Limited	ZZZ Limited
Fixed rate market	12%	10%
Floating rate market	Prime + 1%	Prime

ZZZ Limited borrows long-term at a fixed rate of 10 per cent. The company plans to convert this fixed rate liability into a floating rate liability.

ZZZ Limited enters into a swap deal with AAA Limited. ZZZ Limited is the floating-payment party, agreeing to pay prime to AAA Limited. The two companies agree to share the savings in interest costs equally.

Required:

Given that AAA Limited is the fixed payment party to ZZZ Limited, determine the fixed rate that AAA Limited should pay in the swap deal. (5 marks)

(c) Global International Limited is a multinational investment bank. The bank is considering issuing a US Dollar ($)/ Japanese Yen (¥) dual currency bond for ¥150,000,000. The bond will pay the coupons in Japanese Yen and the principal amount will be repaid in US Dollars. The bond will make a principal payment of $1,360,000 in two years with interest paid in both years 1 and 2. The spot exchange rate is ¥110.29/$1. The yield curves on the US Dollar and Japanese Yen are flat at 7 per cent and 3 per cent respectively.

Required:

(i) The coupon rate if the bond is issued at fair market conditions. (6 marks)

(ii) The percentage price of the bond if the actual coupon rate is 6 per cent. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) The East African countries have established a common market for the East Africa Community trade bloc, which came into effect on 1 July 2010. The East Africa Community projects to have a common currency by the year 2012.

Discuss the benefits that would accrue to the East African countries from the adoption of a common currency. (8 marks)

(b) Ujuzi Limited is considering investing 60 per cent of its funds in United States equity markets and 40 per cent in the United Kingdom equity markets. The expected returns and risks of the two markets are as follows:

	Expected return (%)	Expected risk (%)
United States equity index	14	15
United Kingdom equity index	18	20

The correlation coefficient between the returns of the two markets is 0.34.

Required:

The portfolio standard deviation. Interpret your result. (4 marks)

(c) XYZ Limited, a company based in Kenya, is considering applying for a foreign currency syndicated loan. The following two options are available to the company:

Option A

A United States (US) Dollar loan of US Dollars ($)50 million with a 7-year maturity at an interest rate of 9 per cent per annum payable on an annual basis. There is a 2-year grace period after which 10 per cent of the initial principal amount has to be repaid annually from year 3 to year 6 and the balance at the end of year 7.

Option B

A British Sterling Pound (£) loan of £30 million at an interest rate of 6 per cent per annum. The loan has similar maturity and conditions of repayment as the US Dollar loan.

The currency in use in Kenya is the Kenya Shilling (Ksh.).

The current exchange rates are as follows:

Ksh.80/$
Ksh.130/£

The US Dollar and British Sterling Pound are expected to appreciate at the rates of 5 per cent and 8 per cent per annum respectively.

Required:

Evaluate the two options available to XYZ Limited and advise the company on the best option. (8 marks)

(Total: 20 marks)

QUESTION FIVE

(a) Contrast country risk from economic risk. (2 marks)

(b) A certain multinational corporation is in the process of formulating an international financial policy.

Suggest four ethical issues that could arise during the formulation and implementation of the international financial policy. (4 marks)

(c) Analyse three organisational structures that could be adopted by a multinational corporation for reducing tax liability. (6 marks)

(d) Beth Mutua resides in country X, which imposes a wealth tax on financial assets. She is considering investing Sh.10,000,000 in the country for 15 years. The rate of return on the investment is 14 per cent per annum. The wealth tax is 3 per cent per annum. No other tax is payable on the investment.

Required:

(i) The value of the investment after 15 years. (3 marks)

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(ii) The percentage tax drag. Interpret your result. (5 marks)

(Total: 20 marks)

INTERNATIONAL FINANCE CSIA PART III SECTION 6

FRIDAY: 3 December 2010 **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) Briefly discuss the reasons for the emergence of multinational corporations. (10 marks)

(b) Describe the process of overseas expansion. (6 marks)

(c) Explain the factors that affect the equilibrium exchange rate. (4 marks)

(Total: 20 marks)

QUESTION TWO

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

(i) Translation exposure. (3 marks)

(ii) Operating exposure. (3 marks)

(iii) Transaction exposure. (3 marks)

(b) The following exchange and interest rates were quoted on the Reuters Financial Services screen:

Currency	Ninety-day interest rates	Spot rates	Ninety-day forward rates
Pound (£)	$7^{7}/_{16}$ - $^{5}/_{16}$%	¥240.9696 - 9912/£	¥224.5731 - 8692/£
Yen (¥)	$2^{3}/_{8}$ - $^{1}/_{4}$%		

Required:

(i) Determine whether there exists an arbitrage opportunity. (9 marks)

(ii) Calculate the profit an arbitrageur would make from £1,000,000. (2 marks)

(Total: 20 marks)

QUESTION THREE

(a) In the context of international finance, explain the following:

(i) How the "law of one price" is enforced by international arbitrageurs. (3 marks)

(ii) Purchasing power parity (PPP) theory. (3 marks)

(iii) Interest rate parity (IRP) theory. (3 marks)

(iv) International Fisher Effect (IFE). (3 marks)

(b) The following information relates to inflation and exchange rates in Kenya and Rwanda:

	Kenya	Rwanda
Inflation rate (per annum)	7%	5%
Exchange rate: 1 January 2010	9 RFr. = 1 Ksh.	

Required:

Using the PPP theory, estimate the exchange rate between the two currencies on:

(i) 31 December 2010. (2 marks)

(ii) 31 December 2012. (2 marks)

(c) Assume that between 1995 and 2010 the Japanese Yen (¥)/US dollar ($) exchange rate moved from ¥271.96/$ to ¥112.75/$. During the same period, the consumer price index (CPI) in Japan rose from 109.2 to 143.0 while the United States CPI rose from 98.9 to 189.9.

Required:

If PPP had held over this period, determine the ¥/$ exchange rate in 2010. Interpret your answer. (4 marks)

(Total: 20 marks)

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QUESTION FOUR

You are the Financial Analyst at SSA Ltd. The Company is considering undertaking some equity investment in the international market.

You have obtained the following data from the Morgan Stanley Capital International relating to the correlation between some foreign markets and the United States (US) market and the world index:

Country	Correlation with US market	Standard deviation of returns %	Beta from US perspective	Correlation with world index	Beta from world perspective
United States	1.00	53.20	1.00	0.84	0.90
Canada	0.71	66.53	?	0.72	?
Japan	0.29	79.49	?	0.68	?
Austria	0.16	72.85	?	0.33	?
Sweden	0.42	78.46	?	0.57	?
United Kingdom	0.51	82.27	?	0.68	?
World index	0.84	49.53	0.78	1.00	1.00

Required:

(a) (i) Calculate the betas for Canada, Japan, Austria, Sweden and United Kingdom both from the US and world perspective. (5 marks)

(ii) Comment on your results in (a) (i) with reference to the US and the world index betas. (1 mark)

b) Highlight five risks of international equity investment. (5 marks)

c) Explain the benefits that would accrue to SSA Ltd. from international portfolio investment. (4 marks)

d) Identify and explain the barriers to international portfolio diversification. (5 marks)

(Total: 20 marks)

QUESTION FIVE

a) In the context of a currency futures market, differentiate an initial performance bond from a maintenance performance bond. (4 marks)

b) Explain how the process of marking to market of a futures contract protects investors in case of huge losses. (4 marks)

c) On Monday morning, you short on Chicago Mercantile Exchange (CME) Yen (¥) futures contract containing ¥12,500,000 at a price of US dollars ($) 0.008233. Assume that the broker requires a performance bond of $4,590 and a maintenance performance bond of $3,400. The settlement prices for Monday through Thursday are $0.008342, $0.008381, $0.008175 and $0.008169 respectively. On Friday you close out the contract at a price of $0.008194.

Assume that you begin with an initial balance of $4,590 and that your round-trip commission is $27.00.

Required:

(i) The daily cash flows on your account. (6 marks)

(ii) Describe any performance bond calls on your account and hence determine the cash balance with your broker as at the close of business on Friday. (6 marks)

(Total: 20 marks)

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OF MANAGEMENT STUDIES

INTERNATIONAL FINANCE
CSIA PART III SECTION 6

TUESDAY: 8 June 2010. 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) Capital budgeting for a foreign based project is likely to be considerably more complex than capital budgeting for a domestic project.

Explain five factors that would pose challenges in capital budgeting for a foreign based project. (10 marks)

(b) Distinguish covered interest arbitrage from uncovered interest arbitrage. (5 marks)

(c) The interest rate on a given investment in pound sterling (£) is 12% in London while the interest rate on a comparable investment in US dollar ($) in New York is 7%. The £ spot rate is $1.95 and the 1-year forward rate is $1.88.

Required:
Calculate the profit an arbitrageur would make from the discrepancy in the interest rates based on a $1 million transaction. (5 marks)
(Total: 20 marks)

QUESTION TWO

(a) Explain the following terms:

(i) Multilateral netting. (2 marks)

(ii) Currency collars. (2 marks)

(b) Infrag Limited is a Kenyan based multinational company with four 100% owned subsidiaries based in Uganda, Rwanda, Malawi and Zambia. The four subsidiaries experience major cash flows amongst themselves.

The following were the cash flows for the month of April 2010:

Domicile of subsidiary paying	Amount paid in US dollars ('000')	Domicile of subsidiary receiving
Uganda	500	Rwanda
Uganda	400	Zambia
Rwanda	250	Uganda
Rwanda	200	Zambia
Rwanda	300	Malawi
Malawi	200	Rwanda
Malawi	250	Zambia
Zambia	400	Uganda
Zambia	600	Rwanda
Zambia	500	Malawi

Required:
(i) Using a table, illustrate how the subsidiaries could benefit from multilateral netting. (6 marks)

(ii) Explain the benefit that the subsidiaries would derive from the multilateral netting in (b) (i) above. (2 marks)

(c) In September 2009, Multinational Industries Ltd. (MIL) predicted the March 2010 spot rates for the pound sterling (£) to be as follows:

Spot rate($)	Probability
1.80	0.15
1.85	0.20
1.90	0.25
1.95	0.20
2.00	0.20

Required:
(i) Expected spot rate for March 2010. (2 marks)

(ii) If the six-month forward rate is $1.90, advise MIL whether to sell forward its £500,000 trade receivables due in March 2010. (3 marks)

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(Total: 20 marks)

QUESTION THREE

(a) Differentiate between the following sets of terms:

(i) Payer swaption and receiver swaption. (2 marks)

(ii) Comparative advantage and absolute advantage. (2 marks)

(b) Explain three reasons why most emerging economies adopt trade restrictions. (6 marks)

(c) Discuss five impediments to international capital mobility. (10 marks)
(Total: 20 marks)

QUESTION FOUR

The managers of BKM Ltd., a Kenyan multinational, are discussing whether or not to set up a foreign subsidiary in a Southern African country. The government of the country has recently changed its policy towards foreign investments. One of the measures that could be implemented in the future is the clause to restrict the remittances of dividends from the Southern African country. BKM Ltd. expects to remit about 180 million Kwacha per year to Kenya if the government does not implement the policy. Restricted funds may be reinvested internally within the Southern African country, but the government of that country is likely to control the domestic interest rates.

The investment in the Southern African country subsidiary has an expected net present value (NPV) of Ksh.2 million. The Kwacha is expected to depreciate by approximately 10% per year relative to the Ksh. The cost of capital for BKM Ltd. is 20% per annum for the Southern African capital investment. The current spot exchange rate is 20 Kwacha/1Ksh. The currency of the Southern African country is the Kwacha while the currency in Kenya is the shilling (Ksh.).

Required:
(a) Assuming that the Southern African country restricts remittances of dividends for 3 years, calculate the approximate minimum interest rate required in order for the investment to be financially viable. (9 marks)

(b) Discuss the alternative ways which BMK Ltd. could use to avoid the restriction on the remittance of dividends. (6 marks)

(c) Explain how currency options could be used to manage interest rate risk. (5 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Explain why foreign currency cash balances do not cause transactions exposure. (3 marks)

(b) Using a suitable example, explain how matching of currency cash flows could offset operating exposure. (4 marks)

(c) US Ltd., a company based in the United States (US), sold machinery to UK Ltd., a company based in the United Kingdom, for pound sterling (£) 1,000,000. The sale was made in March 2010. The payment was due in three months time.

The currency of the US is the US dollar ($).

The following information is provided:

Spot exchange rate	$1.7640/£
Three-month forward rate	$1.7540/£
Cost of capital	12%
UK 3-month borrowing interest rate	10% per annum
UK 3-month investment interest rate	8% per annum
US 3-month borrowing interest rate	8% per annum
US 3-month investment interest rate	6% per annum

March 2010 put option in the over-the-counter (OTC) market for £1,000,000; strike price $1.75 (nearly at the money); 1.5% premium.

March 2010 put option in the OTC market for £1,000,000; strike price $1.71 (out of the money); 1% premium.

The US Ltd.'s foreign exchange advisory service forecasts that the spot rate in three months will be $1.76/£.

Required:
Determine the impact of the following hedging techniques:

(ii) Money market hedge. (5 marks)

(iii) Options market hedge. (5 marks)

(Total: 20 marks)

CSIA PART III

INTERNATIONAL FINANCE

FRIDAY: 4 December 2009. **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

Explore Ltd. is a multinational company. The company intends to enter into a foreign market in a developing economy.

Required:

(a) Explain two advantages and one disadvantage of the following modes of entry into the foreign markets that could be used by Explore Ltd.:

(i) Exporting. (3 marks)

(ii) Turnkey projects. (3 marks)

(iii) Licensing. (3 marks)

(iv) Franchising. (3 marks)

(v) Joint ventures. (3 marks)

(vi) Wholly owned subsidiary. (3 marks)

(b) Explain the first-mover disadvantages that Explore Ltd. may encounter by entering the foreign market. (2 marks)

(Total: 20 marks)

QUESTION TWO

(a) (i) Describe three types of exposures that multinational companies (MNCs) face by investing in foreign countries. (6 marks)

(ii) Explain how the MNCs could mitigate against the exposures identified in (a) (i) above. (3 marks)

(b) Dopey Ltd. requires sterling pound (£) 200,000 in 180 days time. The company is considering various strategies for raising the amount. The following information regarding the United Kingdom (UK) and United States (US) markets whose currencies are the sterling pound (£) and US dollar ($) respectively is available to Dopey Ltd.:

£	spot rate	= $1.50
£	180 day forward rate	= $1.47
UK	180 day deposit rate	= 4.5%
UK	180 day borrowing rate	= 5.0%
US	180 day deposit rate	= 4.5%
US	180 day borrowing rate	= 5.0%

Additional information:

1. A call option on £ that expires in 180 days has an exercise price of $1.48 and a premium of $0.03.
2. A put option on £ that expires in 180 days has an exercise price of $1.49 and a premium of $0.02.
3. For purposes of the option, Dopey Ltd. believes the spot rate may take the following probabilities:

Spot rate	Probability (%)
$1.43	20
$1.46	70
$1.52	10

4. Assume that the forward rate is the correct prediction on future spot rates for purposes of a no hedge strategy.

Required:

Compute the impact of the following strategies available to Dopey Ltd.:

(i) Forward market hedge. (2 marks)

(ii) Money market hedge. (2 marks)

(iii) Option market hedge. (2 marks)

(iv) Leading. (2 marks)

(v) No hedge. (2 marks)

(c) Using the results obtained in (b) above, advise Dopey Ltd. on the best strategy to use to raise the £200,000. (1 mark)

(Total: 20 marks)

QUESTION THREE

(a) Explain the distinguishing characteristics between a foreign currency futures contract and a forward currency contract. (10 marks)

(b) Explain the following terms in the context of an option:

(i) Intrinsic value. (2 marks)

(ii) Time value. (2 marks)

(c) A speculator working for International Currency Traders believes that the Mexican peso (Ps) will fall in value relative to the US dollar (US$) by January 2010. He observes that:

1. A January 2010 futures contract is for Ps 500,000.
2. The prices are quoted in US dollar per Mexican peso.

Required:

(i) Assuming the speculator takes a short position on one Mexican peso contract at a settle price of $0.10958/Ps, calculate his profit or loss if the spot exchange rate at maturity of the contract is $0.09500/Ps. (3 marks)

(ii) Calculate the profit or loss the speculator would make if he took a long position on one Mexican peso contract at a settle price of $0.10958/Ps and the spot exchange rate at maturity of the contract was $0.08000/Ps. (3 marks)

(Total: 20 marks)

QUESTION FOUR

(a) Explain the meaning of the following terms and their importance in international financial markets:

(i) LIBOR. (2 marks)

(ii) Euribor. (2 marks)

(b) ABC Bank Ltd. entered into a one-year currency swap with quarterly payments 200 days ago by agreeing to swap US dollars 1,000,000 for Euro 800,000. The bank agreed to pay an annual fixed rate of 5% on the Euro 800,000 and receive a floating rate tied to LIBOR on the US dollars.

The current LIBOR and Euribor rates and the corresponding present value factors are shown in the table below:

Days	LIBOR rates (%)	Present value factor	Euribor rates (%)	Present value factor
70	4.0	0.9923	5.2	0.9900
90	4.4	0.9891	5.6	0.9862
160	4.8	0.9791	6.1	0.9736
180	5.2	0.9747	6.3	0.9695

Assume that the current spot exchange rate is Euro 0.75 per 1 US dollar and the 90-day LIBOR rate at the last payment date was 4.2%.

Required:

Using the above information, determine the value of the swap to the bank today. (12 marks)

(c) An international money market investor is presented with a bid of 1.6625 US dollar/pound and the ask of 1.6635 US dollar/pound.

Determine the bid-ask spread as a direct quote from the perspective of a British investor. (4 marks)

(Total: 20 marks)

QUESTION FIVE

(a) (i) Describe the term "tax arbitrage". (2 marks)

(ii) Explain how multinational companies could use transfer pricing as a means of tax arbitrage. (6 marks)

(iii) Suggest two ways in which tax authorities could curb abuses of transfer pricing. (2 marks)

(b) (i) Explain the term "triangular arbitrage". (2 marks)

(ii) Able Ltd. has Swiss Francs (SF) 10,000,000. The company could buy or sell the Japanese Yen (¥), US dollar (US$) or the SF quoted at the following exchange rates:

Bank	Rate
Citibank Ltd.	¥120.00/US$
Deutch Bank Ltd.	SF 1.60/US$
Barclays Bank Ltd.	¥80.00/SF

Required:
Calculate the profit that Able Ltd. could realise through triangular arbitrage. (8 marks)
(Total: 20 marks)

INTERNATIONAL FINANCE

PILOT PAPER

August 2009. **Time Allowed: 3 hours.**

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

QUESTION ONE

(a) Discuss the concepts of horizontal and vertical foreign direct investments (FDI). (4 marks)

(b) Explain the benefits and costs of FDI to host countries. (8 marks)

(c) Explain the components of balance of payments in developing countries. (8 marks)
(Total: 20 marks)

QUESTION TWO

(a) Differentiate between a straddle and a strangle in the context of currency derivatives. (4 marks)

(b) An investor is considering two call options, 1 and 2 on Australian dollars (A$) which are currently available in the market as follows:

	Option 1 A$	Option 2 A$
Strike price	0.640	0.650
Premium	0.019	0.015

An option contract for an Australian dollar represents 50,000 units.

Required:
Assuming that an investor buys the Option 1 call and sells the Option 2 call, determine the net profit the investor would make if the Australian dollar appreciates to:

(i) A$ 0.645 (4 marks)
(ii) A$ 0.700 (4 marks)

(c) The following call and put options on the British pound (£) are available:

	Call option	Put option
Premium on £	0.035	0.025
Strike price	1.500	1.500
Option contract units	31,250	31,250
Spot rate at expiration	1.400	1.400

Determine the net profit or loss to:

(i) The writer of both options. (4 marks)
(ii) The buyer of both options. (4 marks)
(Total: 20 marks)

QUESTION THREE

(a) Identify three causes of international debt crisis. (6 marks)

(b) Argue the case for and against fixed exchange rate and floating exchange rate systems. (10 marks)

(c) Outline the reasons for a government's intervention in the foreign exchange markets and approaches used by the government in the interventions. (4 marks)
(Total: 20 marks)

QUESTION FOUR

(a) Explain three techniques that a firm may use in forecasting exchange rates. (3 marks)

(b) Ujuzi Motors Ltd., a motor vehicle dealer domiciled in Kenya intends to import ten motor vehicles from Country X whose currency is the yellow (Yel.). The currency in Kenya is the Kenya Shilling (KSh.). The purchase cost of each motor vehicle is Yel.1,054,000. Ujuzi Motors Ltd. is considering entering into a futures contract or options contract in order to hedge against possible currency risk.

A financial market researcher has provided the following two alternatives of hedging against possible currency risk:

1. A three months futures contract. The current price of the futures contract is 1Yel./KSh.0.975. The futures contract size is Yel.125,000. The tick value is Yel.12.50; where one tick is 0.01 cents per Yel.
   Note: 1KSh. is equivalent to 100 cents.
2. A currency option at an exercise price of 1Yel./KSh.0.9980. The option premium is 1.98 KSh. per 100 Yels.

The current spot rate is 1Yel./KSh.0.9812.

The researcher has predicted the following market scenarios in three months time:

Scenario I
Spot rate 1 Yel. : KSh.0.9998
Futures price 1 Yel. : KSh.0.9860

Scenario II
Spot rate 1 Yel. : KSh.0.9660
Futures price 1 Yel. : KSh.0.9580

Required:
For both scenarios I and II, determine:

(i) The cost of hedging and the hedging efficiency using the futures contract. (9 marks)
(ii) The cost of hedging using the currency options. (6 marks)
(iii) Explain the most efficient means of hedging based on your results in (b) (i) and (b) (ii) above. (2 marks)
(Total: 20 marks)

QUESTION FIVE

(a) Identify and briefly explain three instruments of international diversification. (6 marks)

(b) ZH Ltd., a Kenyan firm, has a one year contract to construct factories in Uganda. At the end of the year the factories will be paid for by the Ugandan Government in Uganda Shillings (USh.).

The price has been fixed at USh.2 billion. The local currency in Kenya is the Kenya Shilling (KSh.). In order to fulfill the contract, ZH Ltd. will need to invest USh.1 billion in the project immediately and an additional fixed amount of USh.500 million in six months time. The Ugandan Government has offered ZH Ltd. a fixed rate currency swap for one year for the full USh.1.5 billion at a swap rate of USh.20/KSh.1. A net interest of 10% per annum would be payable in Uganda Shilling by ZH Ltd. to the Government. There is no forward foreign exchange market for Uganda Shilling against Kenya Shilling.

Forecast of inflation rates for the next year are as follows:

Probability	Kenya	Uganda
0.25	4%	40%
0.50	5%	60%
0.25	7%	100%

The Uganda Shilling is a free floating currency which has not been subject to major Government intervention. The current spot rate is USh.25/KSh.1. ZH Ltd.'s opportunity cost of capital is 12% per year in Kenya. The company has no access to funds in Uganda.

Required:
Evaluate whether it is likely to be beneficial for ZH Ltd. to agree to the currency swap offered by the Ugandan Government. (14 marks)
(Total: 20 marks)