# **KASNEB**

#### 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 I 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 (£):

1.7090 - 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)

#### **OUESTION THREE**

(e) (i) Explain the Frm "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	- 6
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.
- 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.

CF62 Page 2 Out of 3 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.

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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)

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

PVIF.	= 1/(1+1	r)" = (1+r)-"
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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	009
16	.8528	.7284	.6232	.5339	.4581	.3936	.3387	.2919	.2519	.2176	.1631	.1229	1069	.0930	.0708	.0541	.0320	.0193	.0118	0073
17	8444	.7142	.6050	.5134	.4363	.3714	.3166	.2703	.2311	.1978	.1456	.1078	.0929	.0802	.0600	.0451	.0258	.0150	.0089	0054
18	.8360	.7002	.5674	.4936	.4155	.3503	.2959	.2502	.2120	.1799	.1300	.0946	.0808	0691	.0508	.0376	0208	.0118	.0068	.0039
19	.8277	.6864	.5703	.4746	.3957	.3305	.2765	.2317	.1945	.1635	.1161	.0829	.0703	.0596	.0431	.034	.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	2001				,		

<sup>\*</sup> The factor is zero to four decimal places

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

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

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payments	1%	2%	3%	4%	5%	6%	7%	<b>3%</b>	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		
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		0.7813	0.7576
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	C2 6243			2.4869	2.4018	2.3216	2.2832	2.2459	2.1743		1.4568	1.3916	1.3315
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4654	3.3872	3.3121		3.1699		2.9137	2.8550	2.7982	2.6901	2.1065 2.5887	1.9813	1.8684	1 7663
5	4.8534	4.7135	4.5797	4.4518	4.3295		4.1002		3.8897			3,4331		3.2743		2.9906	2.4043 2.7454	2.2410 2.5320	2.0957 2.3452
6	5.7955	5,6014	5.4172	5.2421	5.0757	<b>4</b> .9173	4.7665	4.6229	4.4859	4.3553	4 4 4 4 4	3 0007							
7	6.7282	6.4720	6.2303	6.0021		5.5824	5.3893		5.0330	4.8684			3.7845	3.6847	3.4976		3.0205	2.7594	2 5342
8	7.6517	7.3255	7.0197	6.7327	64632		5.9713		5.5348	5.3349	4.5638	4.2883	4.1604	4.0386	3.8115	3.6046	3.2423	2.9370	2.6775
9	8,5660	8.1622		7,4353	71078	6.8017	6.5152		5.9952		4.9676	4.6389	4.4873	4.3436	4.0776	3.8372	3.4212	3.0758	2.7860
10	9.4713	8.9826		8.1109	7.7217		7.0236		_	5.7590	5.3282		4.7716	4.6065	4.3030	4.0310	3.5655	3.1842	2.8681
-		0.0000	0.0002	0.1100	*	7.3001	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			
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		3.7757	3.3351	2 9776
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		4.4392	3.8514	3.3868	3.0133
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455			7,3667	6.6282	6.0021	5.7245		4.9095	4.5327	3.9124	3.4272	3.0404
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122				7.6061		6.1422		5.4675	5.0081	4.6106	3.9616	3.4587	3.0609
										7.0001	0.0103	5.1422	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 7000	4 0000		
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	4.7296	4.0333	3.5026	3.0882
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		4.7746	4.0591	3.5177	3.0971
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	5.2732	4.8122	4.0799	3.5294	3 1039
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136		6.6231	6.2593	5.9288	5.3162 5.3527	4.8435 4.8696	4.0967 4.1103	3.5386	3.1090
													3.2050	5.5100	3.3327	4.0030	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 5040	3 4 2 2 2
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12,4090	11.2578	10.2737	9 4 2 6 9	8.0552	7.0027	6.5660	6.1772	5.5168	4.9476			3 1220
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	4.1601		3 1242
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	3.5541	4.9995	4.1659 4.1666		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			3 1250
													9.0031	G. £402	, ,,,,	4.7333	4 1667	3.5714	3 1250