



**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. (4 marks)
- 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 Mwangela specialises in cross-rate arbitrage.

He notices the following quotes:

Bank quotations	American Terms		European Terms	
	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)

- (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	One standard deviation
	ZAR	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

**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)**

**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)**