

# FOREX CLASS 3

## HOME WORK SUPPORT

### COVERAGE

Question			Answer			Lecture Time
Q. No	Page no.	Book	Q. No	Page no.	Book	
2	2	CW QUESTION BOOK	2	2	CW ANSWER BOOK	00:00:30 TO 00:02:29
3	2	CW QUESTION BOOK	3	2	CW ANSWER BOOK	00:02:30 TO 00:11:27
5	3	CW QUESTION BOOK	5	3	CW ANSWER BOOK	00:11:28 TO 00:25:30
6	3	CW QUESTION BOOK	6	3	CW ANSWER BOOK	00:25:31 TO 00:31:16
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
Case Study	-	-	-	-	-	-

**Question 2. [ CW Q Book Page no.2]**

An exchange rate between two currencies has increased to 1.4500. If the base currency has appreciated by 8% against the price currency, the initial exchange rate between the two currencies was closest to:

- A. 1.3340.
- B. 1.3426.
- C. 1.5660.

*(Source: FOD)***Answer: [ CW Answer Book Page no.2]****B is correct.**

The percentage appreciation of the base currency can be calculated by dividing the appreciated exchange rate by the initial exchange rate. In this case, the unknown is the initial exchange rate. The initial exchange is the value of X that satisfies the formula:

$$1.4500/X = 1.08$$

Solving for X leads to  $1.45/1.08 = 1.3426$ .

**Question 3: [ CW Q Book Page no.2]**

ABN-Amro Bank, Amsterdam, wants to purchase ₹ 15 million against US\$ for funding their Nostro account with Canara Bank, New Delhi. Assuming the inter-bank, rates of US\$ is ₹ 51.3625/3700, what would be the rate Canara Bank would quote to ABN-Amro Bank? Further, if the deal is struck, what would be the equivalent US\$ amount.

*(Source: ICAI)***Answer: [ CW Answer Book Page no.2]**

Here Canara Bank shall buy US\$ and credit ₹ to Vostro account of ABN-Amro Bank. Canara Bank's buying rate will be based on the Inter-bank Buying Rate (as this is the rate at which Canara Bank can sell US\$ in the Interbank market)

Accordingly, the Interbank Buying Rate of US\$ will be ₹ 51.3625 (lower of two) i.e.  $(1/51.3625) = \$ 0.01947/₹$

Equivalent of US\$ for ₹ 15 million at this rate will be

$$= \frac{15,000,000}{51.3625} = \text{US\$ } 2,92,041.86$$

or  $= 15,000,000 \times \$ 0.01947 = \text{US\$ } 2,92,050$

**Question 5. [ CW Q Book Page no.3]**

Consider the following quotations:

$$1 \text{ USD} = \text{GBP } 0.7650/70$$

$$1 \text{ SOUTH AFRICAN RAND (SAR)} = \text{SWISS FRANC (SFR)} 0.3540/10$$

$$1 \text{ MEXICAN PESO (MP)} = \text{SPANISH PESETA (SP)} 15.3250/90$$

- i. A British exporter exports goods worth USD 90,000 from London. What amount of GBP will be receivable on conversion ?
- ii. A Mexican firm imports goods from Spain worth SP 90,000. What amount of MP is required to settle the payment ?
- iii. A South African firm has surplus funds of SAR 4,00,000 and decides to invest in Switzerland. What amount of SFR would be invested ?

**(Source: FOD)**

**Answer: [ CW Answer Book Page no.3]**

$$\text{GBP/USD} = 0.7650 / 0.7670$$

$$\text{SFR/SAR} = 0.3540 / 0.3610$$

$$\text{SP/MP} = 15.3250 / 15.3290$$

$$\text{i. Amt of GBP that will be receivable on conversion} = 0.7650 \times 90,000 = \text{GBP } 68,850$$

$$\text{ii. Amt of MP required to settle the payment} = \frac{90,000}{15.3250} = \text{MP } 5872.76$$

$$\text{iii. Amt of SFR that will be invested} = 0.3540 \times 4,00,000 = \text{SFR } 1,41,600$$

**Question 6: [ CW Q Book Page no.3]**

A Japanese firm decides to acquire a UK based co. for a purchase consideration of 500 million pound. At that time, exchange rate was:

$$1 \text{ GBP} = \text{Yen } 125.65/15$$

However, there was a 10 days delay and the exchange rate changed to,

$$1 \text{ Yen} = \text{GBP } 0.00785/0.00795$$

What is the impact of the exchange rate change on the cost of acquisition of the Japanese firm in yen terms ?

**(Source: FOD)**

**Answer: [ CW Answer Book Page no.3]**

¥/GBP = 125.65/126.15 (Spot rate)

After 10 days, GBP/¥ = 0.00785 / 0.00795

At old exchange rate, cost of acquisition = ¥ 500 × 126.15 = ¥ 63,075

After 10 days, cost of acquisition = 500/ 0.00785= ¥ 63,694.27

Hence, loss in delay = ¥ (63,694.27 - 63,075) = ¥ 619.27 million

## SINGLE QUESTION BASED MCQ

**Question 1: [MCQ of Q2]**

An exchange rate between two currencies has increased to 1.4500. If the base currency has appreciated by 8% against the price currency, the initial exchange rate between the two currencies was closest to:

- A. 1.3340.
- B. 1.3426.
- C. 1.5660.
- D. 1.4630

**Answer:**

**B is correct.**

The percentage appreciation of the base currency can be calculated by dividing the appreciated exchange rate by the initial exchange rate. In this case, the unknown is the initial exchange rate. The initial exchange is the value of X that satisfies the formula:

$$1.4500/X = 1.08$$

Solving for X leads to  $1.45/1.08 = 1.3426$ .

**Question 2: [MCQ of Q3]**

ABN-Amro Bank, Amsterdam, wants to purchase ₹ 15 million against US\$ for funding their Nostro account with Canara Bank, New Delhi. Assuming the inter-bank, rates of US\$ is ₹ 51.3625/3700, what would be the rate Canara Bank would quote to ABN-Amro Bank?

Further, if the deal is struck, what would be the equivalent US\$ amount.

- A. Rate quoted by Canara Bank to ABN-Amro Bank: ₹51.3700; Equivalent US\$ amount: \$2,91,942.25
- B. Rate quoted by Canara Bank to ABN-Amro Bank: ₹51.3625; Equivalent US\$ amount: \$2,91,942.25
- C. Rate quoted by Canara Bank to ABN-Amro Bank: ₹51.3625; Equivalent US\$ amount: \$2,92,050
- D. Rate quoted by Canara Bank to ABN-Amro Bank: ₹51.3700; Equivalent US\$ amount: \$2,92,050

**Answer:**

**C is correct.**

Here Canara Bank shall buy US\$ and credit ₹ to Vostro account of ABN-Amro Bank. Canara Bank's buying rate will be based on the Inter-bank Buying Rate (as this is the rate at which Canara Bank can sell US\$ in the Interbank market)

Accordingly, the Interbank Buying Rate of US\$ will be ₹ 51.3625 (lower of two) i.e.  $(1/51.3625) = \$ 0.01947/₹$

Equivalent of US\$ for ₹ 15 million at this rate will be

$$= \frac{15,000,000}{51.3625} = \text{US\$ } 2,92,041.86$$

or  $= 15,000,000 \times \$ 0.01947 = \text{US\$ } 2,92,050$

**Question 3: [MCQ of Q6]**

A Japanese firm decides to acquire a UK-based company for a purchase consideration of 500 million pounds. At that time, the exchange rate was:

**1 GBP = Yen 125.65/126.15**

However, there was a 10-day delay, and the exchange rate changed to:

**1 Yen = GBP 0.00785/0.00795**

What is the impact of the exchange rate change on the cost of acquisition of the Japanese firm in Yen terms?

- A. Loss of ¥619.27 million
- B. Loss of ¥630.00 million
- C. Profit of ¥619.27 million
- D. No impact on cost

Answer:

**A is correct.**

¥/GBP = 125.65/126.15 (Spot rate)

After 10 days, GBP/¥ = 0.00785 / 0.00795

At old exchange rate, cost of acquisition = ¥ 500 × 126.15 = ¥ 63,075

After 10 days, cost of acquisition = 500/ 0.00785= ¥ 63,694.27

Hence, loss in delay = ¥ (63,694.27 - 63,075) = ¥ 619.27 million

**Question 4:**

The Canadian dollar (CAD) exchange rate with the Japanese yen (JPY) changes from JPY/CAD 75 to JPY/CAD 78. The CAD has:

- A. depreciated by 3.8%, and the JPY has appreciated by 4.0%.
- B. appreciated by 3.8%, and the JPY has depreciated by 4.0%.
- C. depreciated by 9.3%, and the JPY has appreciated by 7.9%.
- D. appreciated by 4.0%, and the JPY has depreciated by 3.8%.

**Answer:**

**D is correct.**

The CAD has appreciated because it is worth a larger number of JPY. The percent appreciation is  $(78 - 75) / 75 = 4.0\%$ . To calculate the percentage depreciation of the JPY against the CAD, convert the exchange rates to direct quotations for Japan:  $1 / 75 = 0.0133$  CAD/JPY and  $1 / 78 = 0.0128$  CAD/JPY. Percentage depreciation =  $(0.0128 - 0.0133) / 0.0133 = -3.8\%$ .

## CASE STUDY BASED MCQ OF Q5

Consider the following quotations:

1 USD	= GBP 0.7650/70
1 SOUTH AFRICAN RAND (SAR)	= SWISS FRANC (SFR) 0.3540/10
1 MEXICAN PESO (MP)	= SPANISH PESETA (SP) 15.3250/90

### Question 1:

A British exporter exports goods worth USD 90,000 from London. What amount of GBP will be receivable on conversion?

- A. GBP 68,700
- B. GBP 68,850
- C. GBP 69,000
- D. GBP 67,950

### Question 2:

A Mexican firm imports goods from Spain worth SP 90,000. What amount of MP is required to settle the payment?

- A. MP 5872.76
- B. MP 5880.00
- C. MP 5865.00
- D. MP 5900.00

**Question 3:**

A South African firm has surplus funds of SAR 4,00,000 and decides to invest in Switzerland. What amount of SFR would be invested?

- A. SFR 1,41,400
- B. SFR 1,41,500
- C. SFR 1,41,600
- D. SFR 1,42,000

**Answer:**

1. B is correct.
2. A is correct.
3. C is correct.

**Explanation:**

$$\text{GBP/USD} = 0.7650 / 0.7670$$

$$\text{SFR/SAR} = 0.3540 / 0.3610$$

$$\text{SP/MP} = 15.3250 / 15.3290$$

i. Amt of GBP that will be receivable on conversion =  $0.7650 \times 90,000 = \text{GBP } 68,850$

ii. Amt of MP required to settle the payment  $\frac{90,000}{15.3250} = \text{MP } 5872.76$

iii. Amt of SFR that will be invested =  $0.3540 \times 4,00,000 = \text{SFR } 1,41,600$