1. If direct quote is Rs. 45/US $, how can this exchange rate be presented under indirect quote?

Solution

US $ 1/Rs. 45 = US $ 0.0222/Rs.

2. If indirect quote is US $ 0.025/Rs., how can this exchange rate be shown under direct quote?

Solution

Rs. 1/US $0.025 = Rs. 40/US $

3. Consider the following bid-ask price: Rs. 40-40.50/US$. Find the bid-ask spread.

Solution

=(40.50-40.00)/40.50

= 0.0123 or 1.23%

4. Find out the bid rate if ask rate is Rs. 40.50/US$ and the bid-ask spread is 1.23%.

(40.50-x)/40.50 = 0.0123

40.50-x= 0.0123*40.50

40.50-0.50 = x

x = 40.00

5. The administered exchange rate in India was Rs. 7.91/US$ during 1981-90. The price index in India and USA rose by 67% and 26 % respectively. Find out whether there was any change in real exchange rate during this period.

Solution

There was no change in the nominal exchange rate as it was an administered one. But there was change in the real exchange rate depending on the price level differential. The change in real exchange rate

= Rs. 7.91X167/126 = Rs. 10.48 US$

6. The spot exchange rate between Indian rupee and US dollar in 1995 was Rs. 30/US$ when the price index in both the countries was 100. By 2000, rupee was devalued to 45/US$ and at the same time, the price index moved up during this period in India and USA to 110 and 125 respectively. Find out the extent of change in nominal and real exchange rates.

Solution

Change in nominal exchange rate:

US dollar appreciated by (45-30)/30 =50% during the period.

Change in real exchange rate:

In 1995 there was no difference in the real and nominal exchange rate in as much as the price index was the same in both the countries. But in 2000, the real exchange rate moved to:

45X(110/125) = Rs. 39.60/US$

The real exchange rate changed only by 32 % compared to 50% change in the nominal exchange rate. This is because of disparate growth in the price level in the two countries.

7. Find out the forward rate differential if spot rate of US $is Rs. 45.00 and one-month forward rate is Rs. 45.80

=(45.80-45.00/45.00)360/30*100

= 21.33 %

It will be known as a forward premium as the value of US $ has increased.

8. Find the one-month forward rate of US dollar if spot rate is Rs. 45 and the forward premium is 12 %.

$360/30(x-45.00/45) = 0.12$

$x-45 = 0.12 *45*30/360$

$x = 45 +0.45$

$x = 45.45$