

# FOREX:

List of unique questions with specific points to be remembered:

Q. No.	Topic	Specific points.
Q-1C	premium / Discount in two way quot.	<p>provide two solutions</p> <p>(i) prem/disc on btd rate and ask rate separately.</p> <p>(ii) prem/disc on mid rate [i.e. mid of Bid &amp; Ask]</p> <p>[In fact, mid rate is concept of CMA institute but CA Institute may also copy.]</p>
Q-1D	Broken period Swap point and prem/disc on average rate.	<p>• calculate prem/disc using average value of base.</p> <p>i.e. <math>\frac{FR - SR}{Avg} \Rightarrow \frac{SR + FR}{2}</math></p> <p>• AS specifically mentioned to use average rate.</p>
Q-2D	IRPT/PPPT	<p>• Ignore "annually compounded" word and solve question.</p> <p>• No linkage of 3m data with 6m &amp; 1year.</p> <p>• All are separate.</p>
Q-3B	Forward hedge	<p>• Consignment rate is custom department rate</p> <p>• calculate loss/gain using consignment rate.</p> <p>• prem/disc using Bank rate.</p>

<p>Q-3C</p>	<p>prem/disc and transaction loss/gain</p>	<p>• SR: \$1 = FF 5.70</p> <p>• prem on Franc <math>\Rightarrow</math> 5% [god]</p> <p>• correct calculation of 90 days rate is to increase \$ value</p> <p>• However, ICAI started doing approx calculation.</p> <p>• So, prefer following.</p> <p><math>\rightarrow</math> Base currency prem/disc = 0</p> <p><math>\rightarrow</math> i.e. Disc on \$ = 5%</p> <p><math>\rightarrow</math> \$1 = FF 5.70 - 5%</p> <p><math>\Rightarrow</math> Apply same rule in all Q.</p>
<p>Q-3D</p>	<p>prem/disc and loss/gain</p>	<p>SR: £1 = Can \$ 2.5</p> <p>Given: Can \$ decline by 2%</p> <p>Think about base currency £.</p> <p>Here, £ should appreciate by 2%</p> <p>Hence: GMFR: £1 = Can \$ 2.5 + 2%</p> <p>Same technique.</p>
<p>Q-3E</p>	<p>Forward hedge</p>	<p>Given: Exchange rate will decline by 8% but not mentioned which currency.</p> <p><u>Interpretation-1</u>: It will work in this question.</p> <p>Assume 8% discount on base currency (i.e. ₹)</p> <p>Because rate is £1 = JPY xxx</p> <p><u>Interpretation-2</u>: Ki's currency Ko depreciate karne se importer ko loss hoga usko depreciate kijiye.</p>

It will work in all question.

Q-3F	forward hedge	<ul style="list-style-type: none"> <li>• upfront premium is calculated on equivalent amount calculated using forward rate.</li> <li>• It is payable <b>today</b></li> <li>• Hence take loan to pay this and <b>repay loan</b> at <b>6m</b>.</li> <li>• Amount under forward cont = Contract Amt @ FR + Repayment (i.e. FV of upfront premium)</li> </ul>
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Q-3G	Forward hedge for loan	<ul style="list-style-type: none"> <li>• 6m LIBOR <math>\Rightarrow</math> 2%</li> <li>• It is annual rate derived using 6m life security traded in London money market</li> <li>• For advice: compare Expected rate and FR No calculation required.</li> </ul>
Q-3H	Forward hedge for loan	<ul style="list-style-type: none"> <li>• Exactly same as Q-3G</li> <li>• But for advice: calculate <b>Fair FR</b> using IRPT and then compare with <b>actual FR</b></li> </ul>
Q-3I	Forward hedge for loan.	
	<p style="text-align: center;">↓</p> <p><b>Average life is given</b></p>	<ul style="list-style-type: none"> <li>• Average loan life is <b>3.4 year</b> with overall tenure of <b>5 years</b>.</li> <li>• Do all calculation for 3.4 years assuming 0% time val. [In fact it is "PVIFA"]</li> <li>• In third point there is mistake in ICAE solution Appropriate: Take Total saving in hedging cost</li> </ul>

		<p>ICAI: Took only <u>1 year</u> <u>saving</u></p> <ul style="list-style-type: none"> <li>For prem/disc in point (iii) Do same treatment</li> <li>Rate: £1 = ₹90</li> <li>prem on ₹ = 10%</li> <li>Think for base currency</li> <li>Disc on \$ = 10%</li> <li>∴ £1 = ₹90 - 10%</li> </ul>
Q-3J	contribution to sell ratio	<ul style="list-style-type: none"> <li>Average contribution to sell ratio</li> <li>= <math>\frac{\text{Total contribution}}{\text{Total sale}}</math></li> <li>• <u>Recurable</u>: ¥/\$/€</li> <li>• <u>Rate</u>: ₹1 = ¥/\$/€ xxx</li> <li>Use ASK rate to convert.</li> </ul>
Q-4B	Settlement on different dates	<ul style="list-style-type: none"> <li>Time value amount is converted using <u>FR</u></li> <li>2/10 net 90</li> <li>2% discount by paying in 10 days otherwise normal credit period is 90 days.</li> </ul>
Q-5B	money market hedge.	<ul style="list-style-type: none"> <li>AS only interest rates are given, use money market hedge.</li> <li>ICAI calculated loss/gain also by comparing mmh amount with receivable recorded at SR.</li> <li>Recommended to calculate loss/gain also. (if you remember)</li> </ul>

<p>Q-5C</p>	<p>money market hedge.</p>	<ul style="list-style-type: none"> <li>• use net receipt at 1m = £100,000</li> <li>• SR: €1 = £ 1.7820  <math display="block">\begin{array}{r l} &amp; 1.7820 \\ -0.0002 &amp; +0.0002 \\ \hline &amp; \end{array}</math> </li> <li>• strength wise rate is illogical but specifically mentioned per €</li> </ul>
<p>Q-5E</p>	<p>Tax adjustment on forward contract &amp; mmh</p>	<ul style="list-style-type: none"> <li>• outflow under forward cont = Forward amount ± Tax or Tax saving</li> <li>• In money market hedge use interest rate net of tax                      i.e. interest rate <math>\times (1-T)</math></li> </ul>
<p>Q-5F</p>	<p>mmh with cost of forward hedge.</p>	<ul style="list-style-type: none"> <li>• calculate % cost in point (ij)</li> <li>Cost = <math>\frac{\text{Extra outflow under FC}}{\text{Equivalent amt @ SR}} \times 100</math></li> </ul>
<p>Q-6D</p>	<p>Cross rate</p>	<ul style="list-style-type: none"> <li>• cover rate <math>\Rightarrow</math> Applicable interbank rate to buy HK\$</li> </ul>
<p>Q-6E</p>	<p>Cross rate</p>	<ul style="list-style-type: none"> <li>• same as 6D</li> <li>• Mum-London £74.3</li> <li><math>\therefore \text{£1} = \text{₹74.30}</math></li> <li>London-Copenhagen DKK 11.42</li> <li><math>\therefore \text{£1} = \text{DKK 11.42}</math></li> <li><u>Cross rate of London:</u></li> <li><math display="block">\frac{\text{₹}}{\text{DKK}} = \left[ \frac{\text{₹}}{\text{£}} \times \frac{\text{£}}{\text{DKK}} \right]</math></li> <li>• Similarly calculate New York rate and select beneficial</li> </ul>

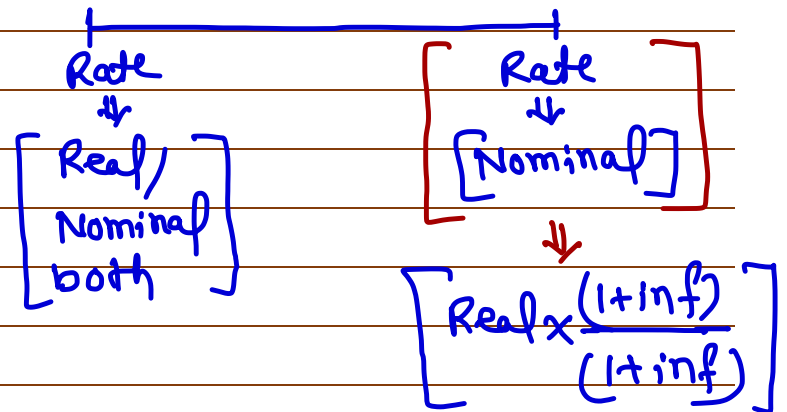
Q-6F	cross rate • loss due to strike	<ul style="list-style-type: none"> <li>• First calculate cross rate and then margin adjustment</li> <li>• <u>Reason</u>: Bank approaches inter Bank hence inter Bank rate is applicable. So first cross then margin</li> </ul>
Q-6G	• cross rate	<ul style="list-style-type: none"> <li>• Same treatment as Q-6F</li> <li>• In previous solution ICAI adjusted margin first and then cross.</li> <li>• Now ICAI corrected it's solution. Hence, first cross then margin.</li> </ul>
Q-6H	Cross rate.	<ul style="list-style-type: none"> <li>• Same current rate is quoted by two banks.</li> <li>• Hence compare two bank rates and select beneficial to calculate minimum CHF outflow.</li> </ul> <p>≡</p> <ul style="list-style-type: none"> <li>• problem in rate interpretation also.</li> <li>• first currency base USD/CHF: \$1 = CHF xxx</li> </ul>
Q-6I	partial hedging with cross rate	<ul style="list-style-type: none"> <li>• Actual strategy: Buy spot \$ and convert it into ¥ using 6m FR.</li> <li>• <u>Interpretation</u>: Buy \$ at 6m SR and convert \$ into ¥ using 6mFR</li> </ul>

<p>Q-7A</p>	<p>post shipment credit</p>	<p>Due to transit period of 20 days</p> <ul style="list-style-type: none"> <li>• Notional due date = <math>60 + 20 = 80</math> days</li> <li>Applicable forward rate:                     <ul style="list-style-type: none"> <li>Either 2m or 3m</li> </ul> </li> <li>• AS swap points are in increasing order (i.e. premium), forward period is rounded to lower side (i.e. 2m)</li> </ul> <p>⇒ Agar discount hota to ⇒ Higher rounding off (3m)</p>
<p>Q-8A</p>	<p>Home currency and foreign currency return</p>	<ul style="list-style-type: none"> <li>• Requirement ⇒ calculate rate of return</li> <li>• Confusion ⇒ which currency return?</li> <li>• AS premium on \$ is given calculate home currency return.</li> </ul>
<p>Q-8B</p>	<p>''</p>	<ul style="list-style-type: none"> <li>• Standard &amp; poor index is US market index.</li> </ul>
<p>Q-8C</p>	<p>''</p>	<ul style="list-style-type: none"> <li>• ICAI solution is approx calculation we can opt same solution or we can give accurate calculation.</li> <li>• Assume interest cost in net of withholding tax</li> <li>• Gross cost when raise fund from US and swiss</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>↓</p> <math display="block">\left[ \frac{4\%}{.92} \right]</math> <p>Add: premium</p> <hr style="width: 80%; margin: 0 auto;"/> <p>xxx</p> </div> <div style="text-align: center;"> <p>↓</p> <math display="block">\left[ \frac{3\%}{.92} \right]</math> <p>Add: premium</p> <hr style="width: 80%; margin: 0 auto;"/> <p>xxx</p> </div> </div> <p style="text-align: center;">Net cost in Euro</p>

Q-8.3

Real appreciation  
depreciation

- Normally, real value is in current purchasing power (i.e. in terms of current inflation)
- In other words, Today's Real and nominal value is same.
- But in this question today's value and 1 year ago value are given.
- So 1 year ago value is both real value and nominal value.
- If question is silent assume given value are Nominal.



≡

- Question asks to calculate Prem/Disc on ₹.
- So you can use  $\frac{S-F}{F} \times 100$
- But ICAI used  $\frac{F-S}{S} \times 100$

Q-8.4

Home currency  
or foreign  
currency  
return.

- Rate is ambiguous
- market rate in London for \$ & €
- ↳ Irrelevant.
- Apply strength to interpret rate.
- Given: London office has surplus

Q-9B	Geographical Arbitrage	<ul style="list-style-type: none"> <li>As customer visits all 3 markets, margin is applicable on all rates.</li> <li>calculate all 3 merchant rate first and then check arbitrage.</li> </ul>
Q-10A	Cover int arbitrage	<p>Rate: DEM 1 = CAD 0.775</p> <p>Parity:</p> $(1 + \% \text{CAD}) = (1 + \% \text{DEM}) \times \frac{FR}{SR}$ <p>If LHS &gt; RHS <math>\Rightarrow</math> Deposit CAD  If LHS &lt; RHS <math>\Rightarrow</math> Deposit DEM</p>
Q-10C	Arbitrage and Forw-Negotiation	<ul style="list-style-type: none"> <li>If we approach BANK for negotiation of forward rate then we approach for fair forward rate (i.e. calculated using IRPT/PPPT)</li> </ul>
Q-11C	Nostro vostro	<ul style="list-style-type: none"> <li>DD purchase / Bill purchase: Increase Exchange position No effect in Nostro balance.</li> <li>Remitted by TT: Decrease both exchange position and Nostro balance</li> <li><u>Draft cancelled:</u>  <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Jo Draft issue kiya tha wo cancel honge. Jo purchase kiya tha wo kabi cancel nahi hosakta.</p> </div> </li> <li>Increase Exchange position No effect in Nostro bal.</li> </ul>

Q-12A	LC Arrangement	<ul style="list-style-type: none"> <li>• opening charges on Equivalent amount calculated @ SR.</li> <li>• periodic commission on equivalent amount calculated @ FR</li> <li>• outflow under LC = FV of opening + periodic comm + Equivalent amt @ FR</li> </ul>
Q-13A	Cancellation	<ul style="list-style-type: none"> <li>• opposite contract at forward rate for the period remaining to maturity.</li> </ul>
Q-13C	partial cancellation	<ul style="list-style-type: none"> <li>• Execute original contract for full amount @ agreed FR.</li> <li>• Jo use huwa use karenge Jo nahi huwa wapas karenge @ SR.</li> </ul>
Q-14A	Extension	<ul style="list-style-type: none"> <li>• cancel original contract and enter new contract for new due date</li> </ul>
Q-14B	Extension	<ul style="list-style-type: none"> <li>• Spot rate quoted in wrong way First rate <math>\Rightarrow</math> ASK rate Second rate <math>\Rightarrow</math> Bid rate.</li> </ul>
Q-15A	Early delivery	<ul style="list-style-type: none"> <li>• Execute original forward contract at agreed rate before due date and settle this amount in Inter Bank <math>\Rightarrow</math> Difference is outflow/inflow of fund on which interest to be calculated.</li> <li>• count period from remittance date to original due date (i.e. from 2-mar to 31-mar)</li> </ul>

- IN this question **Institute** committed mistake in counting but in other question ICAI is correct.

- Swap loss:

Difference between:

- Rate used to cancel original Inter Bank FR and
- Early delivery ko jo inter Bank me settle kiya wo.

Q-16A

After Due date.

- Customer ne approach nahi kiya on Due date.

- Sabse pehle inter Bank ki delivery ko jo starting me cover kiya tha.

usko inter Bank market me settle karo.

- Jo difference aaya uspe interest nikalo "max 3 days"

- Yek new contract karo inter Bank me for 3 days. If 3 days FR is not available then nearest shortest FR prevailing on Due date.

↓

Yis rate ka difference settlement bale rate se leke swap loss nikalo.

- Aab Due date + 3 days pe customer ke sath contract cancel karo at spot rate.

Q-17A

cross  
currency  
deal

- Deal in both foreign currency.
- original deal  $\Rightarrow$  sale \$  
square off  $\Rightarrow$  buy \$
- loss/gain in  $\text{€}$   $\Downarrow$   
convert it into  $\text{₹}$

Q-18A

Leading  
lagging

- Receivable & payable ko  
separately cover karna hai  
cash flow date match karne  
ke liye Time Value consider  
karenge.
- Net amount ko forward contract  
apply karenge but  
cancellation bhi karenge jo  
pehle se enter kiya tha.

ICAI me apne main solution  
me given points ko swap point  
nahi assume kiya hai but  
niche note diya hai ki  
students swap point bhi  
assume kar sakte hai.

$\Rightarrow$  we must provide solution  
assuming swap point jo  
class me kiya hai

Q-19A

parallel  
loan

mere bale ko tu loan de  
tere bale ko mai deta hu.

Q-20A

Netting off

• Indian sub will be owed by Malaysian



• Indian sub will owe to US



Q-20B

Netting off

Net exposure: Difference in cash flow  
 $\times$   
 Difference in rate

Q-21A

Cash management

- Decentralised  $\Rightarrow$  Total deficit of all sub in holding co. currency.
- Centralized  $\Rightarrow$  Total deficit - surplus.

Q-21B

Advantage of swapping

option-1: pool all fund in holding co. country and invest.

option-2: Individually invest in own country and convert in holding co. currency using FX and compare.

Q-22A

Exposure management matrix.

