Roll No……..……..

Membership No……

The Institute of Chartered Accountants of India
Certificate Course Forex & Treasury Management
Evaluation Test Booklet

Paper 2

11th October, 2015

Duration- 3 Hours **Total Marks- 100**

INSTRUCTIONS:

1. Please read the instructions carefully given in the question paper and solve it in the space provided.
2. The candidates are not allowed to carry the evaluation test booklet with them. This should be tied up with sheets provided to answer the question Paper.
3. Use Blue/Black pen only.
4. Do not write your Roll No. or Name or other identification other than in the space (perforated) provided on this sheet.
5. Please show Identity Card to the invigilator for verification of your identity, when asked.
6. The candidates may use the simple calculator.
7. In order to get full credit on the problems, the candidates must show all their rough work/ other workings.

(Participant Signature) (Invigilator Signature)

PLEASE RETURN THIS BOOKLET BEFORE LEAVING THE EXAMINATION HALL

Date : 11th October, 2015
Centre : Delhi/ Mumbai /Chennai/Kolkata/Bangalore/Kanpur /Pune/ Patna

(Do not write your Roll No. and Membership number anywhere in the answer sheet except as mentioned above)

Checked by **Verified by**

CERTIFICATION COURSE ON FOREX AND TREASURY MANAGEMENT

Serial. No.	**Total Number of Questions**	**Questions to be answered**	**Total Marks**	**Marks Obtained**
Multiple Choice - Section A	65	65	65	
Short Notes – Section B	7	5	25	
Case Study – Section C	2	1	10	
Total	74	71	100	

Section A

Number of questions: 65

Marks: 65

Multiple choices: There may be more than one correct answer. Please [✔] mark for the correct answer.

Part A: Answer all questions. **1 mark each**

1. _____ is a barrier option?

a. **Knock-in option**
b. Asian option
c. Plain vanilla option
d. None of the above

2. In a participatory forward, the buyer –

a. Protects fully from losses and gains fully from exchange rate changes.
b. Protects fully from losses but does not gain from exchange rate changes.
c. Protects partially from losses and gains partially from exchange rate changes.
d. **Protects fully from losses and gains partly from exchange rate changes**

3. Translation exposure arises in respect of items translated at -

a. Average rate
b. Historical rate
c. **Current rate**
d. All of the above

4. FRA can be used for –

a. Hedging
b. Arbitraging
c. Speculating
d. **Any of the above**

5. The marking to market in respect of a currency future refers to –

a. Putting up for sale specific lot of futures.
b. **Adjusting the margin Money of buyer and seller to reflect the current value of futures.**
c. Quoting Rates for different maturities.
d. Allotting futures among different brokers.

6. Which of the following is/are **true** according to the International Fisher effect?

a. Currencies with higher level of inflation will have higher level of interest rate
b. Real returns are equalized across countries through arbitrage
c. Until the expected real return in two countries are equalized the process of arbitrage continues
d**. Currencies with lower level of interest rate, will appreciate against currencies with higher level of interest rate**

7. K Ltd., issues 15% debentures, the face value being Rs. 100. The net amount realized per debentures is Rs. 97. Debentures are redeemable at par after 10 years. The tax rate for the firm is 50%. What is the cost of these debentures?

a. 5.98%
b. 7.92%
c. 8.24%
d. 15.5%

8. Which of the following forms of purchasing power parity states that changes in spot rates over a period of time reflect the changes in the price levels over the same period in the currencies of the concerned economies?

a. Absolute form
b. Expectations form
c. Relative form
d. Both (a) and (b) above

9. Which of the following is **not** an assumption of Hecksher-Ohlin model?

a. There is no obstruction to trade
b. There are two factors of production
c. Both commodity and factor markets are perfectly competitive
d. There are increasing returns to scale.

10. An audit committee is subcommittee of?

a. External auditors
b. Internal auditors
c. Board of directors
d. WCM Committee

11. Primary purpose of establishing Internal Control in an organization is to

a. Prevent misappropriations and frauds
b. Ensure that risk taking is made difficult
c. Bring out the flaws in the working of various functions
d. All of the above

12. Which of the following liabilities are classified under Time liabilities for the computation of NDTL?

a. Unclaimed deposits
b. Credit balances in the cash credit accounts
c. Outstanding TTs (Telegraphic Transfers), MTs (Mail Transfer)
d. Staff security deposits

13. Risks such as civil riots, natural calamities are covered under
a. Insurance against non-performance
b. Insurance against business risks
c. Umbrella policies
d. Excess liability coverage

14. Petty cash reserves are maintained at low level
i. To prevent unnecessary expenditure
ii. To minimize risk of loss
iii. To minimize work to maintain these reserves
a. (i) only
b. (ii) and (iii) only
c. (ii) only
d. (iii) only

15. The basis of estimation for receipts of interest and dividend in the cash budget is usually by the:
a. Receipts pattern of the past
b. Financial forecast
c. Company's investment portfolio
d. Past proportion of interest and dividend to total sales

16. A company can hold foreign currency balance in India in the form of
a. RFC [D] account
b. FCNR Account
c. Foreign Currency account
d. EEFC account

17. Repo?
a. Is an agreement to sell the securities by the seller to the buyer after a specific period of time and amount
b. Is an agreement to repurchase the securities by the seller from the buyer after a specific period of time and amount
c. Is a redeemable agreement by a company in respect of its preference shares
d. Is an agreement to redeem its equity shares by a company on a specific date and amount

18. Given total debt-equity ratio = 5:4; total assets = Rs.4,500; short-term debt = Rs.600 and total debt consists only of long-term debt and short-term debt, the long-term debt is equal to ?
a. Rs.1,567

b. Rs.1,900
c. Rs.2,167
d. Rs.2,500

19. Which of the following is not a prediction of bankruptcy model?
a. Altman's Z score model
b. Beaver Model
c. Wilcox Model
d. CAPM

20. The quote is said to be a 'European quote' where the exchange is expressed
a. In terms of US dollars per unit of any other currency
b. In terms of number of units of foreign currency per unit of domestic currency
c. In terms of British pound per US dollar
d. In terms of euro per unit of any other currency

21. Wipro Technologies Limited (India) can't take position of which of the following hedge structures in his books:-
a. Cash Flow Hedging
b. Fair Value Hedging
c. Net Investment Hedging
d. All of them

22. Which of the following functions not pertains to Treasury of a Corporate?
a. Treasury Front Office
b. Treasury Middle Office
c. Treasury Back Office
d. **Loan department**

23. Which one of the following is odd man out in respect to Treasury Front Office?
a. Buy and Sell of FX in Interbank market
b. Buy and Sell of Securities in Interbank market
c. Taking new and reversing of old positions as per Corporate mandate
d. Taking care of documentation of Treasury function

24. A Trader sold 20 lots of USD/INR in an exchange (1 lot ~ $ 1000) via currency futures. He dealt at a future price of Rs 68/$ for 3 months. Currently future price is trading at Rs 72/$. What would be M2M (Mark to Market) of trader in an exchange

a. Rs 4000
b. Rs 8000
c. Rs 80000
d. None of them.

25. If Repo Rate is trading at 9%, Reverse Repo at 8 %. Margin over Reverse Repo is 2% then what would be MSF Rate for RBI:-
a. 9%

b. **10%**
c. 11%
d. None of them

26. As a Corporate Treasurer you are having liability of Rs 10,000 Cr in your books for 10 Yrs as a working capital loans at an agreed rate of 8%. If you are making sense that RBI would cut Repo Rates in coming policy then which of the following structure is applicable for you to hedge your exposures:-

a. Call Money
b. MIBOR
c. OIS
d. **MIBOR & OIS**

27. Which of the following is correct definition of Delta in Options Pricing?

a. **Delta is change of Options Pricing w.r.t change in underlying**
b. Delta is change of underlying w.r.t change in Options Pricing
c. Delta is change in Options Pricing w.r.t to lag of time
d. None of these

28. Which of the following is correct definition of Options Payoffs known as Seagull from importer point of view?

a. Buy Call + exporter risk reversal
b. **Buy Call + Importer risk reversal**
c. Sell Call + exporter risk reversal
d. All of them

29. Which of the following is known as Strangle in Options Pricing?

a. **An Options strategy with which investor holds a position in both a call and put with different strike and expiration date**
b. An Options strategy with which investor holds a position in only calls with different strike and expiration date
c. An Options strategy with which investor holds a position in only puts with different strike and expiration date
d. An Options strategy with which investor holds a position in both a call and put with different strike however different expiration dates

30. What do you mean by FRA?

a. **An over-the-counter contract between parties that determines the rate of interest, to be paid or received on an obligation beginning at a future start date.**
b. It is an exchange determined contract and not an OTC contract
c. It works as simple as Forward contracts in currencies
d. All of the above

31. Main role of Middle Office in Treasury Management?
   a. Reconciliation
   b. purchase/sale of securities
   c. **Implementation of Risk management Policy**
   d. Settlement

32. Treasury Policy Manual of a corporate should include
   a. The various limits up to which the corporate can take exposure in treasury activities
   b. The treasury set up
   c. The treasury reporting system
   d. All the above aspects

33. The independent risk assessment of treasury function is done by
   a. Back Office
   b. Front Office
   c. Mid Office
   d. both a and b

34. An American option
   a. can be exercised anytime during the life of the Option
   b. can be exercised only at maturity
   c. is traded only on the American Exchange
   d. is one where the underlying currency is US dollar

35. What do you mean by Swap Annualized Premium either for an exporter or importer?

   a. It is % equivalent of premium received or paid by exporter or importer over spot rate
   b. It is a Reverse repo rate charged by banks from RBI
   c. Excess rate charged by one bank over other on overnight basis
   d. It is a Repo rate charged by RBI from banks

36. Operational risk is defined as
   a. The risk of loss during the normal operations of the bank
   b. The risk of loss resulting from inadequate internal processes, people and systems
   c. The risk of loss beyond the permitted level
   d. The loss due to 'Act of God'

37. Bootstrapping is
   a. A process of calculating zero coupon yield curve from market figures
   b. A process of using interpolation to determine the yields for different maturities
   c. Needed since Government securities are not available for every maturity
   d. All the above

38. The dealers constitute the ----------
   a. Front office

b. Mid office
c. Back Office
d. None of these

39. In Regional Rural Banks, the share holding pattern is
a. Central Government 50%, State Government 35%, Sponsoring Bank 15%
b. Central Government 50%, State Government 15%, Sponsoring Bank 35%
c. Central Government 51%, State Government 35%, Sponsoring Bank 50%
d. Central Government 35%, State Government 50%, Sponsoring Bank 15%

40. As a Corporate Treasurer you are having Foreign Currency liability of $ 2 Bn in Indian books at GBP Libor + 350 Bps. Which of the following curves applicable to you:-

a. MIBOR
b. GBPOI**S**
c. **GBPIRS**
d. GBPCCS

41. Which amongst the following is not a Greek for Options Pricing
a. Delta
b. Gamma
c. Theta
d. Kho

42. The overall net open position, as per RBI guidelines, is
a. The sum of all net short positions or sum of all net long positions whichever is higher
b. The sum of all net short positions or sum of all net long positions whichever is lower
c. The aggregate of all net short positions & all net long positions
d. The difference between sum of all net short positions and sum of all net long positions

43. Private exchange houses abroad are permitted to open rupee accounts with banks in India. They are
a. Treated as Vostro accounts
b. Used for private inward remittances only without exception
c. Opened by banks freely
d. Mainly from Middle East countries

44. A repo @ 5% was held with a security of 6.35% 2020 which has coupon payment dates of 2nd Jan and 2nd July. With 30/360 day count convention, what is the broken period interest for accounting purpose for the first leg?
a. 1.5169
b. 1.4962
c. 1.1944
d. 1.5346

45. The following cannot be a hedged item
a. Recognized asset
b. Recognized liability

c. Unrecognized firm commitment
d. Held to maturity investment for interest rate risk

46. An interest rate collar is a derivative involving
a. The simultaneous purchase of a Cap and the sale of a Floor for different expiration so that the buyer and seller do not have any risk of interest rate fluctuation
b. A strategy for making the derivative free of cost since the premium paid and received are set off
c. The purchaser of the collar hedges against an upward swing in interest rates but Simultaneously relinquishes the right to benefit from any significant fall in interest Rates
d. The purchaser of the collar hedges against a downward swing in interest rates but Simultaneously relinquishes the right to benefit from any significant rise in interest Rates

47. The regulator for Chit Funds is
a. RBI
b. Respective State Government
c. Ministry of Corporate Affairs Government of India
d. SEBI

48. When an Original Issue Discount [OID] bond is bought in the secondary market, the following does not attract potential tax liability
a. The interest attributable to the bond's original issue discount
b. The coupon interest payment made on the bond (if any)
c. Any capital gain or loss that is made on the bond during the time in which it is held
d. The purchase consideration

49. Special audit of the Dealing Room and the system in operation should be conducted
a. At least once in a year
b. At least once in a quarter
c. At least once in half year
d. As regularly as laid down by the management policy

50. As per FEMA, State Bank of India London is treated as
a. Non resident entity
b. Resident entity
c. Foreign entity
d. Indian entity

51. The scope of risk-based internal audit does not include
a. review of the systems in place for ensuring compliance with money laundering controls
b. the guidelines for appraising large credit proposals
c. identifying potential inherent business risks and control risks, if any
d. suggesting various corrective measures and undertaking follow up reviews to monitor the action taken thereon

52. Which is not one of the pillars on which the ALM process rests as per RBI Guidelines?

a. ALM risk management system
b. ALM information system
c. ALM organization
d. ALM process

53. The basic analytical models for ALM analysis and scientific decision making does not include

a. GAP Analysis Model
b. Scenario Analysis Model
c. Black Scholes Model
d. Value at Risk Model

54. As per ICDR regulations 2009, convertible debt instrument means

a. an instrument which does not create any indebtedness
b. is convertible into equity shares of the issuer at a later date
c. the option of the holder of the instrument is a must for such conversion
d. it invariably constitutes a charge on the assets of the issuer

55. The balance at bank as at 17th July is stated on the bank statement as Rs 18,450. Cheques yet to be presented to the bank on this date amount to Rs 19,720. Assuming that the balance in the Bank Account written up in the Cash Book differs only because of deposits awaiting clearance on that date amount to Rs 32,475, what is the bank balance to be reported in the Statement of financial position as at that date?

a. Rs 31,205
b. Rs 5,695
c. Rs 18,450
d. Rs 32, 475

56. For a two-stock portfolio, the maximum reduction in risk occurs when the correlation coefficient between the two stocks is:

a. +1
b. 0
c. -0.5
d. -1

57. With the introduction of FEMA,

a. Indian rupee became convertible for current account transactions
b. Indian rupee became convertible for capital account transactions
c. Indian rupee became convertible for all transactions
d. Indian rupee's convertibility was officially codified in the act

58. In financial markets, Financial Market Infrastructure [FMI] refers to

a. The infrastructure available for conducting financial transactions

b. There is no term as FMI

c. Multilateral system used for clearing, settling and recording transactions

d. INFINET, the networking backbone

59. A customer has not come forward to settle the forward contract booked by him. Such matured forward contracts

a. Shall be automatically cancelled on the 15th day after maturity date

b. Shall be automatically cancelled on the 30th day after maturity date

c. Shall be reported to RBI for further action

d. Will make the customers' accounts NPA

60. Which of the following statement is correct in case of mutual funds business?

a. While commencing mutual fund business, the sponsor's contribution should be atleast 50% of the net worth of the AMC

b. **While commencing mutual fund business, the sponsor's contribution should be atleast 40% of the net worth of the Asset Management Company [AMC]**

c. An AMC cannot route more than 10% or more of the aggregate purchases and sale of securities made in all its schemes through any broker

d. An AMC cannot route more than 25% or more of the aggregate purchases and sale of securities made in all its schemes through any broker

61. Bought-out-Deal (BoD) comes into picture when

a. Companies do not wish to disclose information by way of public issue

b. Promoters do not want to dilute their stake by going public.

c. Small projects require funds but costs of public issue are substantially high

d. Board for Industrial and Financial Reconstruction (BIFR) offers a sick unit to existing blue chips in that industry.

62. The Euro dollar interest rates in London are as under

1 month: 3.25 p.a.

2 month: 3.50 p.a.

3 month: 3.75 p.a.

The one month interest rate after 2 months is expected to be

a. 4.12% p.a.

b. 4.18% p.a.

c. 4.23% p.a.

d. 4.28% p.a

63. Sri Finance offers a hire purchase plan for its corporate borrowers on the following terms:

Flat rate of interest : 12%

Repayment period : 3 years

Frequency : Monthly in advance

Deposit at the inception of hire agreement: 20% of the cost of the asset.

The annual percentage rate using the approximation formula is

a. 18.0%
b. 19.8%
c. 23.4%
d. 24.7%

64. Exaggeration of the loss for the claim from an Insurance Company is called

a. Morale Hazard
b. Inflated loss
c. False claim
d. Moral Hazard

65. A short term loan extended at the time of completion of the project to provide bridge finance until the developer can obtain financing of a more permanent nature is referred to as

a. Bow ties
b. Mini perms
c. Gap loans
d. Buy down loans

Section B

Number of questions: 7

Marks: 25

Note: Answer any five questions. Each answer will carries 5 marks

[Unrelated answers & answers exceeding the brief will attract negative marks]

1. Explain the need for margin for futures contracts.

Ans.

Clearing Houses assumes the Counterparty Risk in the Future Contracts. In order to ensure their Liquidity and thereby safety for the Clearing House, the members are required to keep with the Clearing House **Margin** ranging from 2.5% to 10% of the Contracts outstanding in their names, in the form of Cash, Treasury Bills or Letters of Credit. The Margin that is required to be deposited at the time of entering into the Contract is the initial margin. Another level of margin, lesser than the initial margin, is also prescribed which is known as maintenance margin. The margin money will be adjusted (i.e., balance reduced or increased) with the Change in the Current value of futures. If the margin money is reduced below the maintenance level the member is expected to bring in additional amount and restore the margin at least to the initial level.

2. What are the main Objectives of ALM in Banks?

Ans.:

Asset-Liability Management (ALM) addresses the maturity and interest rate mismatches that exist in the balance sheet, and hence is also referred to as balance sheet management.
The need for ALM is generally perceived in the context of banks and financial institutions, that is, where the mismatch between financial assets and financial liabilities becomes significant. Asset liability management has been described as 'a continuous process of planning, organizing and controlling Asset and Liability volumes, maturities, rates and yields.' In the present environment it is aptly defined as the process of adjusting bank liabilities to meet loan demands, liquidity needs and safety requirements. In the process, ALM manages the Net Interest Margin within the overall risk bearing capacity of a bank.
Main objectives of the ALM are:

a. To protect / enhance the market value of net worth;

b. To increase the Net Interest Income (NII);

c. To maintain / protect spreads or Net Interest Margin.

In other words, the ultimate objective of the ALM is profitability and long term operating viability of the organization in otherwise risky environment.

3. Explain "reciprocal arrangements" under PMLA, 2002 ?

Ans. Black money menace has haunted India with greater intensity in the last decade or so. Noticing the same, efforts are being taken time and again to improve the situation Another progressive feature about PMLA is that it facilitates and recognizes information received from outside territorial boundaries of the Country. As per Section 56 of the PMLA, it authorizes the Central Government to enter into agreements with other countries to further the provisions of this Act.
For obtaining such information an application is to be made to a Special Court by the Investigating Officer or any officer superior in rank to the Investigating Officer and the Special Court, on being satisfied, may issue a Letter of Request to a court or an authority in the contracting State competent to deal with such request to—(i) examine facts and circumstances of the case, (ii) take such steps as the Special Court may specify in such letter of request, and (iii) forward all the evidence so taken or collected to the Special Court issuing such letter of request. Every statement recorded or document or thing received from a Contracting State shall be deemed to be the evidence collected during the course of investigation.

4. What are the 'Contingency Measures' that the bank may put in place to manage liquidity Risk ?
Ans. the bank may put in place to manage liquidity risk include the following:

- **Stand-by credit lines –** fully committed facilities from correspondent banks. Generally such facilities are taken on reciprocal basis. Bank should exercise care that the facility is not "subject to availability of funds" even if a committed facility involves payment of commitment charges.
- **Investment in liquefiable securities –** in order to minimize cost of liquidity, the bank may invest funds in short-term securities or securities that Forex and Treasury Management have a liquid market. Such securities include T-bills, commercial paper, liquid mutual fund units, PSU bonds and AAA-rated corporate securities. While the bank may earn a reasonable return on securities, it must be realized that any distress sale of securities might result in loss of principal amount.
- **Excess holding of SLR securities –** banks generally hold eligible securities, mainly central government bonds (G-sec) in excess of the minimum requirement of 25% of DTL (demand and term liabilities). The excess securities help the bank to borrow under overnight/intra-day repo facility of RBI. The securities are also highly liquid and those which are held for trading, provide ready liquidity to the bank. The securities would also help banks borrow under CBLO facility.

Other measures would include sound liquidity planning preceded by a study of seasonal/cyclical demand for funds, behaviour of deposit customers and pooling of cash resources from branches.

5. As per the foreign direct investment policy what are the Entry routes for Foreign investment?

Ans. Investment coming from abroad by persons eligible to invest in India into Indian Companies is considered as Foreign Direct Investment only when the investment is made in exchange of equity shares, fully and mandatorily convertible preference shares or fully or mandatorily convertible debentures i.e., such instrument that would eventually convert Into equity shares.

The manner in which the investment can be made varies with the sector. These include Automatic Route and Approval Route.

Automatic Route

Under the automatic route, the investment can be made without any prior approval either Of the Government or the Reserve Bank of India in all activities/sectors as specified in the Consolidated FDI Policy, issued by the Government of India from time to time.

Government Route or Approval Route

Investments not covered under the automatic route requires the prior approval of the Government, which are by the Foreign Investment Promotion Board (FIPB), Department of Economic Affairs, Ministry of Finance, by making an application in the relevant Forms.

All of the above would effectively only apply to those investors who meet the eligibility Criteria as mentioned in the FDI Policy. It has been defined as follows:

" a non-resident entity can invest in India, subject to the FDI Policy except in those Sectors/ activities which are prohibited. However, a citizen of Bangladesh or an entity Incorporated in Bangladesh can invest only under the Government route. Further, a Citizen of Pakistan or an entity incorporated in Pakistan can invest, only under the Government route, in sectors/activities other than defence, space and atomic energy and Sectors/ activities prohibited for foreign investment."

6. Write a short note on Underlying and probable exposure?

Answer:

Underlying Exposure

All hedging contracts must have underlying contracted exposure – with the exception of hedging of probable exposure within approved limits. The AD bank must verify documentary evidence of the contracted exposure. SMEs are exempted from producing documentary evidence.

In one of its latest revisions to the derivative guidelines, RBI permitted hedging of export/import transactions denominated in rupees, in order to encourage rupee invoicing in external trade. The rupee exposure can be hedged by the overseas trader through his local bank, or directly through the Indian bank handling the documents, subject to compliance with kyc (know-your customer) norms.

+

Probable Exposure

Hedging of probable exposure (projected business) based on past performance is permitted subject to a limit equal to previous year's export / import turnover, or average export/import turnover of previous three years, whichever is higher. Only companies with minimum net worth of ` 200 cr and export turnover of minimum ` 1,000 cr are permitted to use cost reduction structures. 25% of such hedging must be delivery based and cannot be cancelled before maturity. Balance 75% of hedges, once cancelled, cannot be rebooked.

7. What do you understand by NRE Account and what are the permissible credits and debits in this account?

Ans. **Non-Resident (External) Rupee Account (NRE Account) :** NRE account, which can be opened by the Non resident himself, may be in the form of savings, current, recurring or fixed deposit accounts. This account shall also be maintained in Indian Rupee. The balances held in this account are freely repatriable. The accrued interest income and balances held in NRE accounts are exempt from Income tax and Wealth tax, respectively.

Permissible Credits

NRE account are inward remittance to India in permitted currency, proceeds of account payee cheques, demand drafts / bankers' cheques, issued against encashment of foreign currency, where the instruments issued to the NRE account holder are supported by encashment certificate issued by AD Category-I / Category-II, transfers from other NRE / FCNR accounts, sale proceeds of FDI investments, interest accruing on the funds held in such accounts, interest on Government securities/dividends on units of mutual funds purchased by debit to the NRE/FCNR(B) account of the holder, certain types of refunds, etc.

Permissible Debits

Eligible debits are local disbursements, transfer to other NRE / FCNR accounts of person eligible to open such accounts, remittance outside India, investments in shares / securities/commercial paper of an Indian company, etc.

Loans up to Rs.100 lakh can be extended against security of funds held in NRE Account either to the depositors or third parties. Such accounts can be operated through power of attorney in favour of residents for the limited purpose of withdrawal of local payments or remittances through normal banking channels to the account holder himself.

Section C

Number of questions: 2

Marks: 10

Note : Case Studies. Answer any one. Max 10 marks

1. Horizon Ltd. has to make a US $ 5 million payment in three months' time. The required amount in dollars is available with Syntex Ltd. The management of the company decides to invest them for three months and following information is available in this context:

   –The US $ deposit rate is 9% per annum.
   –The sterling pound deposit rate is 11% per annum.
   –The spot exchange rate is $ 1.82/pound.
   –The three month forward rate is $ 1.80/pound.
   Answer the following questions–

   (i) Where should the company invest for better returns?
   (ii) (ii)Assuming that the interest rates and the spot exchange rate remain as above, what forward rate would yield an equilibrium situation?
   (iii) Assuming that the US interest rate , the spot and forward rates remain as above, where should the company invest if the sterling pound deposit rate were 15% per annum?
   (iv) With the originally stated spot and forward rates and the same dollar deposit rate, what is the equilibrium sterling pound deposit rate

   Ans. :

   (i) US$ Deposit Rate = 9% per annum
   Sterling Pound Deposit Rate = 11% per annum
   Spot Exchange Rate = $ 1.82 / pound
   Three Month Forward Rate = $ 1.80 / pound

   <u>Option I:</u>

   Invest in $ deposit @ 9% per annum for 3 months

   Income = 50,00,000 × 9/12 × 3/12 = $ 1,12,500

Option II:

Available dollars may be converted to pounds at spot rate. Cover forward position and invest @ 11% p.a. for three months.

Spot exchange rate = $ 1.82 / £

So, $ 5 million = 5,000,000/1.82
= £ 2747252.747

Interest earning on £ 2747252.747 @ 11% p.a. = 2747252.747 × 11/100 × 3 months /12
= £ 75549.450

Maturity Amount after 3 months= £ 2747252.747 + £ 75549.450 = £ 2822802.197

Pound converted to dollar at 1.80 / pound Forward rate = 2822802.197 x 1.80 = $ 5081043.954
Gain = $50,81,043.954 – $5,000,000 = $ 81043.954
Hence, Gain – Option I = $ 1,12,500
Gain – Option II = $ 81043.95
Therefore, Syntex Ltd. must invest under Option I in $ at 9%.

(ii) For an equilibrium situation, amount at the end of three months should be equal. Therefore, amount invested in sterling covered by forward rate.

= $ 50,00,000 + $ 1,12,500 = $ 51,12,500
Let forward rate be $ x /£
∴at equilibrium £ 2822802.197 equals 2822802.197 x = $ 51,12,500

∴ x = 51,12,500 /28,22,802.197
= 1.811

∴ Forward Rate = $ 1.811/£

(iii) Interest earned in pounds given same spot and forward rates and interest rate is 15%

= £ 2747252.747 × 15/100 × 3/12
=£ 103021.978
∴
Total £ = 2747252.747 + 1,03,021.978 = 28,50,274.725

Total $ = 2850274.725 x 1.80
= $ 5130494.505

Gain = $ 51,30,494.505 – $ 50,00,000 = $ 130494.505
Earlier Gain = $ 1,12,500
Therefore, at 15% Syntex Ltd. should invest in $ Sterling

iv) For equilibrium sterling deposit rate, amount invested in sterling equals
$ 51,12,500 after three months.
Now, $ 51,12,500 converted to £ at forward rate = $ 51,12,500 / 1.80
= £ 2840277.777

Let sterling rate be X% p.a.

$\therefore 2747252.747 \times X/100 \times 3/12 + 2747252.747$

6868.131867X + 2747252.742 = 2840277.777
6868.131867X = 93025.035
X = 13.54% per annum

2. TNP ltd is in the business of project exports viz.: executing turnkey projects in different parts of the world but mainly in developing world. The projects include building simple housing colonies to constructing & delivering complex airports. It has been bidding successfully for these projects from time to time. The projects are of large value [typical size varying from USD 100 to 500 million] and generally payments receivable over a period of 3 to 5 years. If the bid is successful, there is a large forex exposure. While bidding, naturally, it has to estimate the expected exchange rate and arrive at the profitability and bid. However, it cannot hedge because of the uncertainty. Considering the political set up in most target countries, the decision is always slow and hence the exchange risk to TNP higher. Banks are also hesitant to support bid bond guarantee in view of large amount and the cost of credit insurance appeared to be high. As the newly joined treasury head, what suggestions you have on these?
Answer:
➢ The company can take bid bond guarantee from the banks and ECGC supports the banks by issuing Export Performance Guarantees [EPGs]. Export Performance Guarantee is an insurance cover for banks. The insurance is provided by ECGC with the objective of enabling exporters to obtain the required guarantee facility from banks on easy terms. The Guarantee, which is in nature of a counter guarantee to the bank, is issued to protect the bank against losses that it may suffer on account of guarantees given by it on behalf of export purposes. In order to reduce the cost of participating in global tenders for Projects, EPGs to cover the related Bid Bond Guarantees are issued on payment of 25% of the premium due. No further premium is payable if the exporter is not declared successful in the bid. The balance amount of the premium will have to be paid only if the exporter succeeds in the bid.
➢ TNP cannot book forward contracts for the receivables over the next 3 to 5 years because it is not sure of securing the project under the tender. Moreover, FCs for long term may not be offered by banks. However, option contract is ideal for this type of situation. Sri should buy put option contracts for amounts and maturities matching with its expected down and subsequent milestone payments. The cost to the company is the premium paid, which it has to lose and hence could build into the quote. If TNP is successful, it can exercise the option contracts and get the USD converted to INR at those rates, provided the contract is in the money i.e. it is worth exercising the option contract.