

**PGDM Batch 2016-18**  
**Treasury and Risk Management in Banks**  
**Course Code: (DM 515/IB 512)**

**Trimester –V, End –Term Examination: December, 2017**

**Instruction:**

Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 Marks each	2*10 = 20
C	Compulsory Case Study	15 Marks	15
		<b>Total Marks</b>	<b>50</b>

**SECTION A: Word limit: around 150**

1. a) There are some specified constituents of portfolio of SLR securities of banks. List them in order of liquidity.  
  
 b) The current average yield on SLR bonds is 6.0 % and the cost of deposit is 7.5 %. What should be the effective yield on non - SLR portfolio to cover the cost of maintaining SLR at the prevailing rate? (2.5+2.5)
  
2. a) Name the factors which made the bank treasury a profit center after they were only keepers of CRR and SLR for decades?  
 b) What are the various sources of profits of a treasury in these days? (2.5+2.5)
  
3. Your bank has a liquidity deficit of Rs. 250 crore for a period of 60 days .Your Treasury Head has asked you to decide the option after evaluating the various suitable avenues available to raise funds in current macroeconomic conditions. Prepare a detailed note on the factors you would weigh in evaluation and give suitable recommendation for most suitable investment option of the treasury with justifications.
  
4. A) A 91-day T-bill is being traded at 96.96, Work out its rear-ended yield.  
  
 B) How the three main functions of a bank treasury are kept distinct and work in water-tight compartments? Why is it mandated to keep them in water tight compartments? (2.5+2.5)
  
5. In what ways the Corporate Treasury is different from a Bank Treasury and in what ways both are similar?

**SECTION B:**

**Word limit: around 300 for each full question with all parts**

6. (a) Give one illustration how liquidity risk is managed through ALM process by the bank treasury?

(b) The interbank spot rates are given hereunder:

Spot 1 USD =	Rs. 64.1500 / 1800
Spot / November	800 / 1100
Spot / December	1200 / 1400

- a. Work out TT buying rate
- b. Work out Bill buying rate for 30 days Usance.
- c. Work out TT selling rate

*[Exchange Margins given below can be applied for above workings :*

1 TT Buying rate	0.080%	2 Bills Buying rate	0.150%
3 TT Selling rate	0.150%	4 Bills Selling rate	0.200% ]

(5+5)

7. a) Work out cash consideration for the first leg, Repo interest and total cash consideration for the second leg of REPO with following information:

*Security offered under Repo: 91 days Treasury Bills of GOI maturing on 2<sup>nd</sup> January 2018. The current Price of the security offered under Repo is Rs.96.8430. Date of the Repo is 12-Dec-2017 and the Settlement Date is 18-Dec-2017.*

b) How the Gap method is used under ALM process for management of IRR.

(5+5)

8. a) The GOI wants to sell G-secs for Rs.4500 crores. Table below details the bids received.

Amount bid (crores)	YTM at bid price	Implied Price (Rs.)
400	10.7882 (% per annum)	110.8497
300	10.8002	110.7624
1250	10.7402	111.2000
1400	10.7272	111.2952
650	10.6922	111.5519
750	10.7720	110.9663
300	10.7102	111.4198
100	10.6792	111.6475
1000	10.7552	111.0904

- i. Decide the cut off price for successful bids under French auction?
- ii. Decide the cut off price for successful bids under Dutch auction?
- iii. Decide the implied price at which the bidders will get securities under French auction?
- iv. Decide the implied price at which the bidders will get the securities under Dutch auction?
- v. Explain winner's curse effect if the after-issue market price of the bond is Rs. 109.90.

(b) Funds Transfer Pricing (FTP) is decided by the Bank treasury. Explain the objectives of FTP?

(5+5)

**SECTION C:**

**Word limit: around 500**

**9) Treasury Operations at the Northwest Bank Ltd.**

The bank has a treasury department headed by Mr. Swaminathan. But he has joined recently. He found that the systems for risk management do not seem to be appropriate and adequate. He took stock of the whole situation and found the following position in different aspects of treasury operations as of today. He has jotted down major observations with action points in brackets as a note and given to Treasury Chief for action.

**1. Following observations were made in respect of risk exposure management:**

- i. There were no records of counterparty quantitative limits in respect of at least 40% parties at the bank with whom trades were taking place regularly. Most of the recent deals ranged in value from Rs. 10 lakh to Rs.50 crore and were recommended based on past experience being satisfactory with the parties. No outside agency rating or bank's internal rating assessment sheet in terms of net worth and developments or reports of the counterparties was found on record. Similarly, no other kind of limit was fixed for counterparties.
- ii. There is internal research note that there is an expectation in the market that bond yields will rise from 6.1907 to 6.5100 in very near term.
- iii. Currency wise limits were found to have been set up but there was no objection raised from any quarter on exceeding these limits at number of times.
- iv. "Take profit" and "Stop Loss" limits were not found having been set up.
- v. There is no record of what is being done for interest rate risk management.

**[An assessment has to be made as to what are the risks in each situation and steps required to be taken to create processes to put proper risk exposure management tools system in place.]**

**2. Bank has following assets and liabilities classified by maturity in each time bucket.**

Maturity days/ months	Liabilities	Assets
1 day	700	1000
7 days	1200	1000
14 days	1100	800
28 days	800	900
1-3 months	1000	1100
4-6	1300	1000
7-12	2000	1200
13-24	2400	2700
25-36	1900	1800
>36	1000	1700

*[The above situation of GAP needs to be studied after working out Gap absolute GAP, +/- GAP, Negative Gap % in relation to liabilities and Cumulative GAP. A note has to be written on steps to be taken on liquidity risk and its management.]*

3. The balance sheet of the bank on date of preparing note is given below:

(Amount Rs. Crore)

Capital and Liabilities	Amount	Assets	Amount
		Cash at branches	13,000
Equity Share Capital	13,000	Cash Balances with RBI	16,000
Reserves	74,000	Balance with Banks, Money at Call	26,400
<b>Net Worth</b>	<b>87,000</b>	Loans and Advances	479,600
Deposits	578,000	SLR Investments	222,600
Borrowings	66,000	<b>Total Fixed and Current assets</b>	<b>757,600</b>
<b>Total Debt</b>	<b>644,000</b>		
Other Liabilities & Provisions	69,000	Net Block	5,800
		Other Misc. Assets	36,600
<b>Total Liabilities</b>	<b>800,000</b>	<b>Total Assets</b>	<b>800,000</b>
Contingent Liabilities	646,000		
Book Value (Rs)	450		

It is to be ascertained whether the Bank is maintaining adequate CRAR, CRR and SLR.

*[The above ratios as of today from the B/S need to be worked out. (You may assume 20% risk weight for exposure to other Banks, 105% for loans and advances, 102.5% for investments, 100% for other assets except cash and balances with RBI for which the risk weight may be taken as zero.) The steps needed to be taken in case of shortfall or excess under any of the above regulatory requirements should also be mentioned]*

**Required:**

You are required to take the necessary actions in **all the above issues and situations one by one** based on the above notes assuming that you are the Chief of Treasury department of the Bank.

(5+5+5)