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PAPER - 6B – FINANCIAL SERVICES AND CAPITAL MARKETS

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a Candidate who has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

The question Paper comprises five case study questions. The candidates are required to answer any four case study questions out of five. Answers in respect of Multiple Choice Questions are to be marked on the OMR Answer Sheet only.

Answers to other questions to be written in the descriptive type answer book. Answer to MCQs, if written in the descriptive type answer book will not be evaluated. Candidates may use calculator.

CASE STUDY 1:

The board of directors of the ABC Ltd, at its meeting held on June 11, 2019, has, with the subsequent approval of the members of the Company, by way of a special resolution through Postal Ballot ("Special Resolution"), results of which were declared on 5th August, 2019, approved the proposal to buy back its own fully paid-up Equity Shares of face value of ₹ 5 each ("Equity Shares") from the members of the Company (other than the Promoters, the Promoter Group and Persons in Control of the Company) payable in cash, for an amount aggregating to ₹ 8,260 crores ("Maximum Buyback Size") at a price not exceeding ₹ 800 per Equity Share ("Maximum Buyback Price"), under the open market route through the stock exchanges, in accordance with Companies Act, 2013 and the SEBI Buyback Regulations.

The Buyback has been implemented by the Company by way of Open Market Purchases through the stock exchanges; by the order matching mechanism except "all or none" order matching system, as provided under the Buyback Regulations. The buyback was completed within 6 weeks of the commencement date. Present EPS is ₹ 35.64 with total earnings off ₹ 15,570 Crore. Present P/E multiple is 21.24.

Relevant financial details are as below (All figures are in ₹ Crores):

As on	Mar 31, 2019	Mar31,2018	Mar 31, 2017	Mar31,2016
Equity Share Capital	2,184	1,092	1,148	1,148
Reserves and surplus*	60,749	62,410	66,869	59,934
Net worth/ Shareholders equity	62,933	63,502	68,017	61,082
Total debt**	20,000	18,000	16,000	15,000

*Free Reserves were ₹ 54,636 as on 31st Mar, 2019.

Annexure '1'

Shareholding Pattern

Shareholders	**Pre Buyback**		**Post Buyback**	
	No. of Equity Shares'	**% of Shares**	**No. of Equity Shares**	**% of Shares**
Promoters and / or persons who are in the control and / or acting in concert (Promoter Group)	56,01,82,338	12.82%		
Indian Financial Institutions	31,73,073	0.07%		
Banks	17,09,234	0.04%		
Mutual Funds	58,46,44,086	13.38%		
Indian Public & Corporates	95,54,85,110	21.87%		
Foreign Institutional Investors	1,49,15,64,414	34.14%		
NRis	2,58,96,923	0.59%		
Foreign Nationals and Overseas Corpora Bodies	21,618	0.01%		
American Depository Shares **(ADS)**	74,62,54,648	17.08%		
Total	**4,36,89,31,444**	**100.00%**		

Annexure '2' Share Price Scenarios

Week No.	No. of Shares offered in each week	Opening Price of Week (₹)	Closing Price of Week (₹)	Volume weighted avg price of shares (₹)
Week prior to 1	NA	740	745	750
1	Nil	760	765	755
2	1 .5 crores	750	760	740
3	2 crores	748	755	760
4	2.5 crores	775	778	785
5	3 crores	764	773	775
6	1.325 crores	770	785	790

Post closure of Buyback average closing price for ABC Ltd in Week 7 was 800, Week 8 ·was 810 and Week 9 was 805. It hit all-time new high of 840 in the meantime.

1.1 The 'Buyback Period' as per SEBI Guidelines is defined as period between: **(2 Marks)**

(A) The date of Board of Directors resolution to authorize the buyback of shares and the date on which the payment of consideration to shareholders who have accepted the buyback offer is made.

(B) The date of voting of postal ballot for special resolution to authorize the buyback of shares and the date on which the payment of consideration to shareholders who have accepted the buyback offer is made.

(C) The record date and the date on which the payment of consideration to shareholders who have accepted the buyback offer is made.

(D) The opening date of buyback on recognized stock exchange and the closing date of buyback on the recognized stock exchange.

1.2 The mode through which the Buyback can be executed as per SEBI Guidelines are:

(2 Marks)

(A) Spot Transaction

(B) Private Arrangement

(C) Tender Offer

(D) Negotiated Deals

1.3 The letter of offer is dispatched on 5th June 2019 (Wednesday). Please calculate the date of opening of offer and closure of offer **(2 Marks)**

(A) 10th June 2019 and 25th June 2019

(B) 14th June 2019 and 28th June 2019

(C) 12th June 2019 and 25th June 2019

(D) 16th June 2019 and 30th June 2019

1.4 A Small Shareholder as per SEBI Guidelines is defined as

(A) who holds shares or other specified securities whose market value, on the basis of opening price of shares or other specified securities, on the recognized stock exchange in which highest trading volume in respect of such securities, as on record date is not more than two lakh rupees.

(B) who holds shares or other specified securities whose market value, on the basis of closing price of shares or other specified securities, on the recognized stock exchange in which highest trading volume in respect of such securities, as on record date is not more than five lakh rupees.

(C) who holds shares or other specified securities whose market value, on the basis of closing price of shares or other specified securities, on the recognized stock exchange in which highest trading volume in respect of such securities, as on date of offer letter is not more than two lakh rupees.

(D) who holds shares or other specified securities whose market value, on the basis of closing price of shares or other specified securities, on the recognized stock exchange in which highest trading volume in respect of such securities, as on record date is not more than two lakh rupees. **(2 Marks)**

1.5 If the Buy-back is through Book Building Process then the number of Bidding Centers should be:

(A) Not less than thirty and there shall be at least one electronically linked computer terminal at all the bidding centers.

(B) Not less than sixty centres spread across India.

(C) In all capital cities of the states as well as union Territories of India.

(D) None of the options **(2 Marks)**

1.6 You are a Financial Advisor to Mr. B, a HNI, who wants to participate in the upcoming buyback of ABC Ltd.

Mr. B holds 5000 shares of ABC Ltd. He had bought them at an average price of ₹ 580. He offered his 2000 shares in Week 2, 2500 shares in Week 3 and balance 500 shares in Week 6.

Please advise him whether he should participate in the same or not with specific focus on:

(A) Necessity of buyback for any company and its shareholders **(1 Marks)**

(B) Pre and Post Buyback shareholding pattern - Use format in Annexure 'I' and assume that the Maximum Buyback Size is completed. **(1 Marks)**

(C) Financial returns for Mr. B and your recommendation. Please refer Annexure '2' for relevant inputs. **(3 Marks)**

1.7 You are a CFO of ABC Ltd. Please elaborate the step by step process which will be followed in such buyback issues with specific focus on :

(A) Calculate the amount that will have to be offered in Escrow Account with 50% in cash deposit and 50% in Bank Guarantee form. **(3 Marks)**

(B) The calculation of pay-out amount to investors if Maximum Buyback Size has been executed. Refer Annexure '2' for inputs. **(2 Marks)**

1.8 You are a Head-Compliance (SEBI), who looks after the compliance with various guidelines of SEBI. Please highlight the buyback related compliance for the proposed transaction.

(A) Discuss the compliance with 'Maximum Buyback Size' and identify the 'Minimum Buyback Size' as on the commencement of the buyback. **(3 Marks)**

(B) Calculate & discuss the compliance with Debt Equity Ratio for the buyback.

(2 Marks)

Answer to Case Study - 1

1.1 (A)

1.2 (C)

1.3 (C)

1.4 (D)

1.5 (A)

Ans. to 1.6 (A)

Answer:

The buyback is typically undertaken by the company after considering the strategic and operational cash requirements of the company in the medium term and for returning surplus funds to the members in an effective and efficient manner. Few key reasons for buyback are:

a. The buyback helps the company to return surplus cash to its members;

b. The buyback is generally expected to improve return on equity through distribution of cash and improve earnings per share by reduction in the equity base, thereby leading to long term increase in members' value; and

c. The buyback gives an option to the members of the company, either to sell their equity shares and receive cash or not to sell their equity shares and get a resultant increase in their percentage shareholding in the company post the buyback, without additional investment.

Buy back is useful in case of a company in such situations, where it can utilize it's excess cash balance and save tax on dividend payment to shareholders.

For shareholders, buyback is useful when it is offered to the shareholders at a price which is higher than the price at which it was purchased by them.

Ans. to 1.6 (B)

Shareholders	Pre Buyback		Post Buyback	
	No. of Equity Shares	% of Shares	No. of Equity Shares	% of Shares
Promoters and / or persons who are in control and / or acting in concert (Promoter Group)	56,01,82,338	12.82	56,01,82,338	13.13
Indian Financial Institutions	31,73,073	0.07		
Banks	17,09,234	0.04		
Mutual Funds	58,46,44,086	13.38		
Indian Public & Corporate	95,54,85,110	21.87		
Foreign Institutional Investors	1,49,15,64,414	34.14		
NRIs	2,58,96,923	0.59		
Foreign Nationals and Overseas Corporate Bodies	21,618	0.00		
American Depository Shares (ADS)	74,62,54,648	17.08	3,70,54,99,106	86.87%
Total	**4,36,89,31,444**	**100**	**4,26,56,81,444**	**100**

Non-promoter holding pre-buyback is 3,80,87,49,106 shares.

Maximum no. of shares which will be bought back are 10,32,50,000 (₹ 8,260 crore size @₹ 800 price)

Hence, non-promoter holding post-buyback will be 3,70,54,99,106 shares

Promoters shall not participate in the buyback hence their holding in terms of no. of shares remain same post-buyback.

Alternative Solution

Pre and Post Buyback Shareholding Pattern

Shareholders	Pre Buyback		Post Buyback	
	No. of Equity Shares	% of Shares	No. of Equity Shares	% of Shares
Promoters and / or persons who are in control and / or acting in concert (Promoter Group)	56,01,82,338	12.82	56,01,82,338	13.13

Indian Financial Institutions	31,73,073	0.07	30,87,055	0.07
Banks	17,09,234	0.04	16,62,899	0.04
Mutual Funds	58,46,44,086	13.38	56,87,95,181	13.33
Indian Public & Corporate	95,54,85,110	21.87	92,95,83,210	21.79
Foreign Institutional Investors	1,49,15,64,414	34.14	1,45,11,30,135	34.02
NRIs	2,58,96,923	0.59	2,51,94,893	0.59
Foreign Nationals and Overseas Corporate Bodies	21,618	0.00	21,032	0.00
American Depository Shares (ADS)	74,62,54,648	17.08	72,60,24,701	17.02
Total	**4,36,89,31,444**	**100**	**4,26,56,81,444**	**100**

Ans. to 1.6 (C)

Calculation of Financial Return for Mr. B

Acquisition Price = ₹ 580 x 5000 shares

= ₹ 29,00,000

Return = 2000 shares x ₹ 740 + 2500 shares x ₹ 760 + 500 shares x ₹ 790

= ₹ 14,80,000 + ₹ 19,00,000 + ₹ 3,95,000

= 37,75,000

Return % = 37,75,000 – 29,00,000/29,00,000 x 100

= 30.17%

Hence, financial returns over the period of holding are ₹ 8.75 lakhs.

Particulars	Pre-buyback	Post-buyback
Income for EPS (₹ Crores)	15,570	15,570
No. of shares for EPS (Crores)	436.89	426.57
EPS (₹)	35.64	36.50
PE (Multiple)	21.24	21.24
Price (₹)	756.95	775.27

As per above calculation, the expected price post-buyback should have been ₹ 775 + and pre-buyback the price was – ₹ 755-756. Hence, Mr. should not have sold his shares below ₹ 755 and could have waited for price to cross ₹ 775. Had he sold his entire shares in the week 6, he could got better price. Additionally, the same can be corroborated with the price rise post completion of buyback to ₹ 840 suggesting that investors have found value in the buyback and overall ROE may improve.

Ans. to 1.7 (A)

The company shall, before opening of the offer, create an escrow account towards security for performance of its obligations and deposit in escrow account 25 percent of the amount earmarked for the buyback as specified in the Board/Special Resolution.

The escrow account may be in the form of:

a. Cash deposited with any scheduled commercial bank (SCB); or

b. Bank guarantee issued in favour of the merchant banker by any SCB

Where part of the escrow is in the form of a bank guarantee, the company shall deposit with a SCB, in cash, a sum of at least 2.5 percent of the total amount earmarked for buy-back as and by way of security for fulfillment of the obligations.

Hence, amount to be kept in Escrow Account shall be ₹ 2,065 i.e. 25% of ₹ 8,260 crores.

Out of above, 50% shall be in the form of cash deposited with schedule commercial bank i.e. ₹ 1,032.50 crores.

Another, 50% shall be in the form of bank guarantee in favour of merchant banker i.e. ₹ 1,032.50 crores. Out of which ₹ 206.50 crores, being 2.5% of the Maximum Buyback Size of ₹ 8,260 shall be in the form of deposit with SCB. Hence, amount of Bank Guarantee shall be reduced to this extent.

Hence, total ₹ 1,239 crores (₹ 1,032.50 + ₹ 206.50 crores) shall be in the form of cash deposited with SCB and ₹ 826 crores shall be form of Bank Guarantee totaling to ₹ 2,065 crore of escrow account security.

Ans. to 1.7 (B)

Calculation of pay-out amount to investors if Maximum Buyback Size has been executed

Week No. (1)	No. of shares offered in each week (in crores) (2)	Volume weighted avg. price of shares (₹) (3)	(2) x (3) (₹) (4)
1	Nil	755	0
2	1.5	740	1110
3	2	760	1520
4	2.5	785	1962.5
5	3	775	2325

6	1.325	790	1046.75
	10.325		**7964.25**

Ans. to 1.8 (A)

As per Regulation 4 (i) of the said Buy Back Regulations, the maximum limit of any buy-back shall be twenty-five per cent or less of the aggregate of paid-up capital and free reserves of the company. Moreover, it is further explained in the regulations that in respect of the buy-back of equity shares in any financial year, the reference to twenty-five per cent in this regulation shall be construed with respect to its total paid-up equity capital in that financial year.

Further, Proviso to Regulation 4(iv) also provides that no offer of buy-back for fifteen per cent or more of the paid up capital and free reserves of the company shall be made from the open market.

In the present case, ABC Ltd. has offered a buyback of ₹ 8260 crores which is within the limit as mentioned above as it is evident as per the following calculations:

Maximum Buy Back limit

= 25% of Paid up Capital and Free Reserves

= 25% of ₹ 2184 crores + ₹ 54636 crores = 25% of 56,820 crores

= ₹ 14205.

And, Maximum Buy Back limit for open market

= 15% of Paid up Capital and Free Reserves

= 15% of ₹ 56,820 crores

= ₹ 8523 crores

So, Buy Back offer of buyback of ₹ 8260 crores is within limit

The minimum buyback size is 50% of the amount earmarked for buyback in the Board Resolution and accepted by special resolution. Hence, the minimum size shall be ₹ 4,130 crore.

Ans. to 1.8 (B)

As per Regulation 4(ii) of the Buy Back Regulations, the ratio of the aggregate of secured and unsecured debts owed by the company after buyback shall not be more than twice the paid-up capital and free reserves.

Now, Total Debt after buy back = ₹ 20,000 Crores

And, Total of Paid up Capital and Free Reserves after the buyback offer

= ₹ 56,820 crores – ₹ 8260 crores = ₹ 48,560 Crores

So, debt equity ratio after buy back = Debt/Equity

= ₹ 20,000 Crores/₹ 48,560 Crores

= 0.41: 1

Hence, ABC Ltd. is in compliance with the Debt Equity Ratio as per the buyback regulations.

CASE STUDY 2

Lend & Co., is a public company which is involved in carrying out infrastructure projects. Whilst it started out as a project company aimed at executing power and defense projects, over a period, it also ventured into construction of roads, transmission lines etc. Today the company has a diverse portfolio which it operates on.

Lend & Co., also has a number of subsidiaries some of which are in the form of special purpose vehicles formed for the specific purpose of undertaking projects in the road and transmission sectors. Whilst most of the Lend group's customers are government or its agencies, it also has projects for private players in the solar sector. Given the structure of the Group, Lend & Co., is covered as an investment company under the Reserve Bank of India Guidelines and is registered as a Non-deposit taking NBFC.

Mr. Lender is the Managing Director of Lend & Co. He is also one of the promoters of the Company and is highly passionate about the Group's operations and is highly involved in business strategy and decision making. Over the last year or so, Lender has been slightly worried about the fund and liquidity management at the group level and he feels there is a lot of scope for revising its entire treasury strategy and realign its borrowing portfolio. He had a CFO, who was overseeing the treasury functions and had an excellent relationship with lenders and financiers, but due to certain medical reasons left. Mr. Diligent has now been appointed as the new CFO.

Mr. Diligent comes from a finance background and has handled numerous fund raises and headed the treasury function in his previous organization. Mr. Lender and Mr. Diligent want to undertake various initiatives in the Group to ensure the financial efficiency in the Group.

As part of the key areas which Mr. Diligent wants to touch upon the following:

- *Risk management practices*
- *Practices in raising and deployment of funds*
- *Infrastructure investment trusts*
- *Working capital management*

Risk Management practices:

Based on a review of Mr. Diligent on the treasury practices and operations of the Company, he observed the following features which he termed as "Signals" indicating a required re-look in the risk management practices of the Company:

- *The Company deals with a significant amount of foreign e change though the operations of the Group itself, which in his view, does not warrant such quantum of foreign exchange to be bought and sold. The overall gain made by the Group ' on foreign exchange transactions during 2018-19 was ₹ 320 Crores, including MTM adjustments to the tune of ₹ 270 Crores, and the treasury team was rewarded for the same.*
- *The Company had invested in some new products available in the market. Though there has been no track record in terms of the performance of these products, the junior members in the treasury team believe that these are new generation products and the Company should explore these products with an open mind as this will likely give significant gains in the short term. The overall unrealized gain on these products for FY 2018-19 was ₹ 130 Crores.*
- *The Company has entered into some derivative contracts which are not completely backed up by underlying assets and liabilities. One of the treasury departments KRA was ·to generate as much profit from the derivative transactions so that they are able to contribute to the growth of the Company.*
- *Though there is an "investments and hedging committee" in· place, the members of the committee primarily comprise persons from the treasury department. The head of treasury had an excellent relationship with the erstwhile CFO and there were no formal approvals/reviews that were taking place.*
- *Praveen, who was the blue eyed boy of the Treasury head, takes huge pride in the amount of profits generated by the treasury ·department in the last two years and believes that of all functions within the Company, the treasury department is the one which contributes immensely to the bottom line of the Company.*
- *There is no risk limits set for the amount of derivative contracts that the company can enter into.*

Mr. Diligent held discussions with the MD of the Company to share his thoughts on the above aspects and the MD asked him to prepare a report for discussing these with the Board of Directors of the Company.

Mr. Diligent also highlighted to the MD of Lend & Co., that it also has significant exposure in infrastructure projects undertaken· by subsidiaries, which are primarily into road projects. He said about 78% of the Company's funding has been channelized to these road subsidiaries, who *are facing issues in repayment of borrowing, project overruns and risk potential default in repayment of borrowings to banks. Mr. Lender felt that considering the nature of the industry, it is bound to be the case and as such this should not be a cause of concern. Mr. Diligent mentioned that, whilst nature of the industry is of course to be factored in, he noted that in some of the subsidiaries where the Company had funded, those were in the form of short term inter corporate deposits which are back to back short term loans availed by Lend & Co., though these were eventually deployed by the subsidiaries as part of their projects primatjly to fund excess costs incurred (Overruns). He further mentioned that, these projects were delayed in execution and the likely project overrun including interest costs being treated as part of project costs is about 22% of the overall project costs of all these subsidiaries. Mr. Lender asked Mr. Diligent to look into the above and provide what possible options the Company can consider in respect of addressing some of the concerns expressed.*

One of the options which Mr. Diligent expressed to the MD is to consider Infrastructure Investment Trusts (INVITS) for some of the revenue generating subsidiaries, which proceeds can be used for addressing the funding gaps in the subsidiaries for their ongoing projects. Mr. Diligent also mentioned that the overall value of the underlying assets in the revenue generating projects as of date is about ₹900 Crores. Details ·of these three projects under construction and the status are as below:

- *Project A - ₹280 Crores incurred which is about 42% of the total capital cost, As per an evaluation by an internal engineer, this represents about 60% of the project completion and this project is a public private partnership.*
- *Project B - ₹620 Crores has been incurred, which is about 85% of the total capital cost. This is also a PPP and as per internal engineer, this represents about 80% of the completion status.*
- *Project C - is ₹480 Crores represents 90% of the capital cost and is almost complete in terms of physical status of the project. All approvals and certifications for commencing the project have been received. This project is with a private customer.*

Mr. Diligent also studied the other loans and investments that the Company has in its balance sheet and is keen on suggestions of creating INVITs and other such structures (if any). The key inputs are as below:

- *The Company has significant amount of inter corporate loans and investments in debentures issued by the infrastructure companies.*
- *He feels that the credit evaluation of these parties isn't something which is very positive.*
- *There were no hedging mechanisms in place for some of these borrowings. He feels that the Company should explore options of entering into 'credit default swaps' (CDS) for these*

loans which will help the Company. He wants Praveen and other treasury team members to study the same and provide their thoughts.

- *Praveen shared his initial thoughts and mentioned that CDS are traded on exchanges and are subject to huge regulatory compliance and may not be worth the effort.*
- *Praveen also mentioned that considering the nature of the underlying assets, the premium to be paid will be quite high in terms of the CDS.*
- *Mr. Diligent requested Praveen to also und rstand the pricing theories for pricing of CDS.*

Mr. Diligent also believes that the Company will have some excess cash left in the system post some of his proposals being implemented. In this connection,

- *He also wanted the team to understand and provide him an update in terms of the benefits of investments in mutual funds and the options that the Company can consider for maximizing returns without compromising on basic risks.*
- *He was also particularly keen to evaluate whether the Company should invest in shares or in mutual funds.*
- *Next aspect he wanted the team to analyze are the type of mutual funds to invest in and which would be a safe bet considering the overall risk aspects of the Company.*
- *He was keen in knowing where the mutual funds are made: 'sector funds' or 'arbitrage funds'?*
- *The factor to evaluate which funds to invest in is a key aspect he wanted the team to consider and report back to him on.*

Mr. Diligent had a conversation with his treasury team members to understand their views on the some of the proposals suggested by them. He was particularly interested in knowing what key controls that the Company has to put in place in its treasury operations and how they can proceed in respect of the same.

Mr. Lender called for a meeting at the end of the first quarter and has asked Mr. Diligent to present his proposals to him first, post which he said, he will also call upon a meeting with the Board of Directors. Mr. Diligent agreed that he will do his best to prepare the presentation duly considering all aspects and was very positive that it will be in the best interests of the Company.

Considering the above, you are required to look into the below question and provide your responses:

2.1 *Credit default swap resembles option contracts but are more in the nature of swap arrangements because:* ***(2 Marks)***

(A) Element of choice exists

(B) Element of choice does not exist

(C) CDS is only for hedging whereas options are not for hedging

(D) None of the options.

2.2 *The 'No arbitrage model' of pricing CDS is based on which of the following assumptions:* ***(2 Marks)***

(A) There is zero cost of unwinding the fixed leg of the swap on default and there is no risk free arbitrage.

(B) The is risk free arbitrage

(C) There is no zero cost of unwinding the fixed leg of the swap on default

(D) There is no risk free arbitrage and there is no zero cost of unwinding the fixed leg of the swap on default.

2.3 *A mutual fund which has purchase and redemption options during specific intervals at prevailing NAV prices is called:* ***(2 Marks)***

(A) Open ended fund

(B) Close ended fund

(C) Interval funds

(D) Growth funds

2.4 *The percentage of assets that were spent to run a mutual fund is computed as:* ***(2 Marks)***

(A) Expense/average value of portfolio, where expense includes travel cost, management consultancy and advisory fees.

(B) Expense / average value of portfolio, where expense includes travel cost, brokerage, management consultancy and advisory fees.

(C) Expense/average value of portfolio, where expense excludes travel cost, management consultancy and advisory fees.

(D) Expense/average value of portfolio, where expense represents brokerage.

2.5 *A mutual fund has its net asset value calculated at the end of each trading day. An exchange traded fund has:* ***(2 Marks)***

(A) Its price is based on net asset value and determined at the end of every day

(B) Is fixed and does not undergo any change during the tenure of the fund

(C) Its price change and is determined based on net asset value

(D) Its price changes throughout the day, fluctuating with supply and demand

2.6 *What are your views on the observations of Mr. Diligent on the treasury practices followed by the Group from a Risk Management perspective?* ***(5 Marks)***

2.7 *If Lend & Co., has to go ahead with INVITs, outline the key aspects of how INVITs work and how this will benefit the Company?* ***(3 Marks)***

2.8 *Can Lend & Co., also issue INVITs for the three projects under construction of the Group? What conditions would need to be fulfilled for the same?* ***(3 Marks)***

2.9 *What are the features of a credit default swap and how is it likely to be of use to Lend & Co?* ***(4 Marks)***

Answer to Case Study - 2

2.1 (B)

2.2 (A)

2.3 (C)

2.4 (A)

2.5 (D)

Ans. to 2.6

My views on the observations of Mr. Diligent are as follows:

(i) His observation that the quantum of forex to be bought and sold by the company may be curtailed should be considered.

(ii) Though "Investment and Hedging Committee" has been formed, there is no hedging mechanism in place for the loans taken.

(iii) Moreover, the company has entered into derivative contracts without any backing of underling assets and liabilities, which is not appropriate.

(iv) Further, there are no risk limits set for derivative contracts which is surprising in spite of the fact the company has a hedging committee.

(v) Though Praveen, the Treasury head took pride in the amount of profits generated by the treasury department, the actual situation is grim. 78% of entire funding has been channelized into road subsidiaries which are delayed in execution and interest cost is 22% of overall cost which is quite high.

Further, these road projects are facing issues related to repayment to banks for the amount borrowed.

(vi) Also, investment in some new products without any track record is also not feasible in the long term.

Alternative Solution 1 to 2.6

This question asked is the view on the treasury practices followed by the Group from a risk management perspective.

Before dealing with question, one must recognize the nature of the company that Lend & co. is. Details available in the question indicate that it is a public limited company engaged presently in infrastructure projects acting through a number of subsidiaries. Later on, it is also found described as an investment company under the RBI guidelines and has been registered as a non-deposit taking NBFC.

Details guidelines and regulations have been prescribed by the RBI as to the manner in which NBFC like Lend & Co. can act and function.

An investment company can only invest in share, debentures and securities of other companies and at all relevant times the capital of the company must invested in such securities at least to the extent of 90%. The company cannot carry on infrastructure projects business by itself. Since the question indicates that Lend & Co. has set up a number of subsidiaries that actually looked after the infrastructure business, we can presume no that Lend & Co. has put in capital and debt into these companies and thus qualifies to be called an investment company.

Being a company with assets exceeding ₹500 crores Lend & Co. will be a systematically important non-deposit taking NBFC and subject to special regulations and guidelines.

The question indicates that Lend & Co. has been carrying on a foreign exchange business as a regular part of its business and has made significant profits in which the management is happy. The RBI master directions indicate that such a company can trade in forex futures only to the extent of hedging its exposure. Going beyond the scope will amount to breach of RBI guidelines and invite penal action from the regulator.

Hence, the current activities of Lend & Co. Carrying on a full-fledged forex business are not permitted by RBI regulations and will open up the company to risk of penalty. Though the business might have yielded good profits, the business itself is non-permissible and is vested with risks.

In addition it is also seen that there is no proper control in the conduct of business, no proper hedging of risks and no internal control over the practices followed. Besides being a prohibited business beyond the concept of hedging of its own exposure, this business is beset with managerial risks.

Alternative Solution 2 to 2.6

Effective risk management starts with identification and understanding of various types of risks. Some of the practices that do not indicate good risk management practices include:

- Weak internal control – there was not an effective monitoring mechanism in place.
- Speculative attitude – there was a focus and pride in generating revenue and becoming profit center thereby missing the primary focus of hedging the risks.
- Non-core business – purchase and sale of foreign exchange is not the core areas of business of the group and the same is not questioned by the management, nor were any limits set for the team involved in such dealings. Considering that bulks of these are unrealized gains, there is possibility that a huge loss can be incurred on account of market risk.
- Inexperience – it is observed that the company deals with newer projects which have less or very little experience.
- Superstar attitude – attitude of Praveen indicates that he is a superstar and there is no question raised about his practices.
- Inadequate supervision – this indicates a high exposure to market risk.

Ans. to 2.7

The key aspects of how INVITs work has been briefly explained as below:

INVITs invest in income generating infrastructure projects. SEBI notified the SEBI (Infrastructure Investments Trusts) Regulations, 2014, which governs the issue of INVITs. The salient features of INVITs are as below:

- INVITs shall be set up as a trust and registered with SEBI.
- The parties to the INVIT shall be Trustee, Sponsor, Investment manager and a project manager.
- INVITs shall invest in infrastructure projects either directly or through SPV.
- An INVIT shall hold or propose to hold controlling interest and more than 50% of the equity share capital or interest in the underlying SPV except where the same is not possible due to requirement from the concession arrangement.
- Sponsors of an INVITs shall collectively hold not less than 15% of the total units of the INVITs on a post issue basis for a period of at least 3 years.
- The proposed holding of an INVITs in the underlying assets shall not be less than ₹ 500 crores.
- The aggregate consolidated borrowing of the INVITs and underlying SPVs shall never exceed 49% of the value of the INVITs assets.

- An INVITs, which proposes to invest at least 80% of the value of the assets in the completed and revenue generating infrastructure projects shall:
  - Raise funds only through public issue of units
  - Have a minimum 25% public float and at least 20 investors
  - Have minimum subscription size and trading lot of ₹ Ten lacs and ₹ 5 lacs respectively
  - Distribute not less than 90% of the net distributable cash flows, subject to applicable laws, to the investors on a half yearly basis.
  - Through a valuer, undertake a full valuation on a yearly basis and updating of the same on a half yealy basis and declare NAV within 15 days from the date of such valuation.

  For Lend & Co., if they proceed with proposed INVITs, their stake in the SPVs will be picked up by the INVITs and the proceeds based on valuation can be used to repay some of the short term loans and borrowing which have been used for funding some of the ongoing constructions projects. The revenue generating projects of Lend & Co. group is about ₹ 900 crore and they can proceed with INVITs.

Ans. to 2.8

Lend & Co. can issue INVITs for the three projects under construction of the Group. The conditions to be fulfilled in this regard are as follows:

(i) For PPP project(s):- has achieved completion of at least 50% of the construction of the infrastructure project as certified by an - independent engineer; or has expended not less than 50% of the total capital cost set forth in the financial package of the relevant project agreement.

(ii) For Non-PPP project(s), the Infrastructure Project has received all the requisite approvals and certifications for commencing construction of the project;

Further, listing shall be mandatory for both publicly offered and privately placed INVITs and INVIT shall make continuous disclosures in terms of the listing agreement.

Based on the same, INVITs can invest in:

- Project A – having achieved 60% of the project completion. However, this has to be certified by an independent engineer.
- Project B – as both the conditions of project completion/cost have been met.
- Project C – as all approvals have been obtained.

Ans. to 2.9

The main features of CDS are as follows:

(i) CDS is a non-standardized private contract between the buyer and seller. Therefore, it is covered in the category of Forward Contracts.

(ii) They are normally not traded on any exchange and hence remains free from the regulations of Governing Body.

(iii) The International Swap and Derivative Association (ISAD) publishes the guidelines and general rules used normally to carry out CDS contracts.

(iv) CDS can be purchased from third party to protect itself from default of borrowers.

(v) Similarly, an individual investor who is buying bonds from a company can purchase CDS to protect his investment from insolvency of that company. Thus, this increases the level of confidence of investor in Bonds purchased.

(vi) The cost or premium of CDS has a positive relationship with risk attached with loans. Therefore, higher the risk attached to Bonds or loans, higher will be premium or cost of CDS.

(vii) If an investor buys a CDS without being exposed to credit risk of the underlying bond issuer, it is called "naked CDS".

The primary purpose of CDS is to swap/transfer/exchange the risk of default on a debt. As there is no hedging mechanism in place for the loans given by Lend & Co. (a NBFC) and the credit evaluation is also not positive for the companies to which loans have been given, it will be worthwhile for the company to consider the CDS route.

Uses of a CDS are as below:

- **Hedging** – Main purpose of using CDS is to neutralize or reduce a risk to which CDS is exposed to. Thus, buying CDS, risk can be passed on to a CDS seller or writer.
- **Arbitrage** – It involves buying a CDS and entering into an asset swap.
- **Speculation** - CDS can also be used to make profit by exploiting price changes.

Alternate Solution to 2.9

Features of a Credit Default Swap and its use to Lend & Co.

Lend Co. wants to invest in companies involved in infrastructure projects. Suppose it does so through corporate bonds in company K, say of r % return, it may not be sure of the interest or principle being repaid. Moreover, as a systemically important NBFC, it can subscribe only to highly rated instruments. Therefore, it can cover itself by entering into a credit default swap with another company "S" for a fee, say 1% so that any amount default, S pays up and tries to recover from K and takes over the risk from Lend.

S is the protector or seller of the CDC and Lend is the buyer. Under the RBI Direction, Lend can participate in a CDS only as a buyer and only to the extent of hedging its exposure. It cannot function like S with another party and earn through a CDS.

The Direction spells out the mode of CDS that has to be followed by Lend.

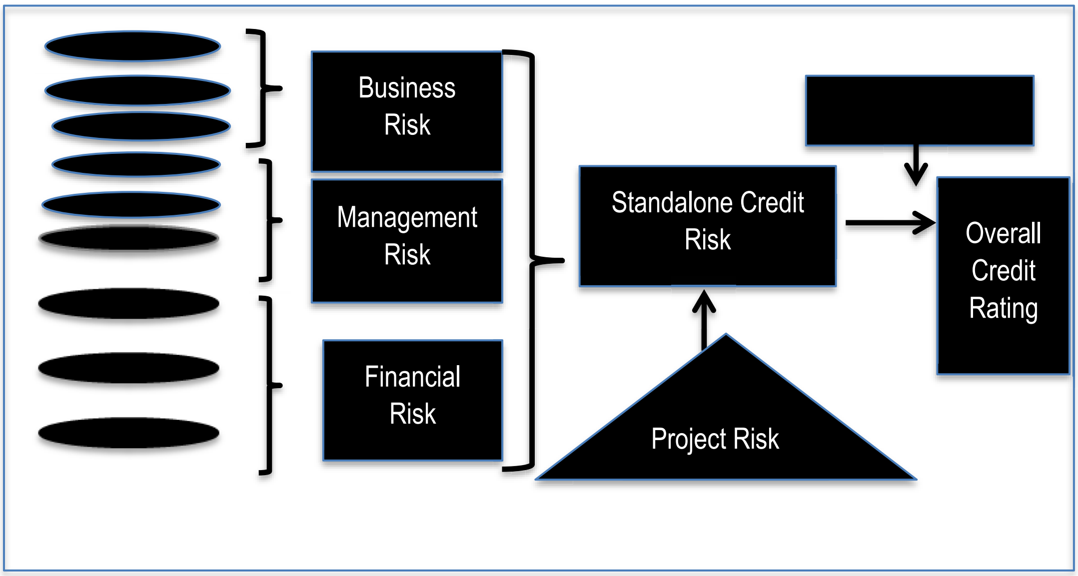
This is useful to Lend, provided it chooses a good protector who will be sufficiently diversified not to succumb to failures. Since most of Lend's funding is in the infrastructure sector, laden with cost and time overruns and as given in the case study, back to back repayments are due, the CDS will help sustain Lend's operations. It should be one of the methods for part of the exposure so that there are other avenues of safety also.

CASE STUDY 3

CRA is one of the prominent Credit Rating Agency in India. You are working there as a Chief Rating Consultant (Large Corporates Segment).

The J Rover Automotive Ltd. has approached CRA to secure credit rating for its planned short-term working capital ₹ 1,000 crores and long-term credit facilities of ₹ 2,500 crores from XYZ Bank.

CRA's Rating Methodology



Above chart summarises the overall methodology of CRA credit rating.

Business Risk carries 30% weight, Management Risk carries 20% weight and Financial Risk carries 35% weight. Parent/Govt support carries 15% weight in the absence of which 5% each *is added in earlier 3 risks. Each risk is benchmarked on a scale of 1 to 5 with 5 being riskiest and 1 being safest.*

Accordingly, weighted avg. rating range is 1 to 5 with below categorization.

Rating 1 - AAA+

Rating 1 to 2 – AAA

Rating 2 to 3 -AA+

Rating 3 to 4 - AA-

Rating 4 - 5 - A+

The analysis of a company's financial ratios is core to CRA's rating process as these ratios help understand a company's overall financial risk profile.

CRA considers four broad parameters:

- *Solvency - Current Ratio and Acid Test Ratio*
- *Coverage - Interest and Debt Service coverage analysis*
- *Capital Structure - Debt Equity and Debt to Capitalization*
- *Operation Cycle – Debtors Collection, Inventory Holding, Creditors Payment and Operating Cycle Period.*

The relative importance varies on a case-specific basis and instead of arithmetic approach while assessing financial risk, CRA makes a qualitative and contextual assessment of these ratios for each case.

The final rating assessment entails the interplay of various other factors such as Industry Risk, Business risk, Project risk, Management risk, as well as support from stronger parent /group /government.

CRA's approach to rating specifically the Automotive Manufacturers involves evaluating their business, management and financial risk profiles. The parameters that are considered for evaluation of business risk profile include the sector analysis, headwinds and growth concerns, if any, company's market position and operating efficiency. Market position assessment focuses on the company's ability to maintain high volumes in a wide variety of market segments. While analyzing operating efficiency, CRA assesses its ability to manufacture technologically-superior vehicles at low costs. Operations in the industry are fixed-cost intensive; therefore, well-engineered products and significance volumes are key factors. CRA also assesses the company's financial and management risk parameters to arrive at the final rating.

The brief overview of J Rover's business and summary of key events alongwith key financial data of J Rover is as below:

- *J Rover is one of the leading automobile manufacturers in the world, providing mobility solutions to over 100 countries. It's portfolio includes wide range of passenger cars, utility vehicles, trucks, and buses. It has a strong global network of 80 subsidiaries, associate companies and joint ventures, including the one in the UK and in South Korea.*
- *The Automotive Industry across globe is undergoing significant headwinds in the context of shift to ACES (Automated, Connected, Electric and Shared) mobility.*
- *Below table captures the overall volume and EBIDTA margin of J Rover's International and Indian operations over last two years*

Volumes	***FY 2019***	***FY 2018***
International	*5,65,000*	*6,33,000*
Indian		
Passenger Cars	*2,15,000*	*1,90,000*
Commercial Cars	*5,20,000*	*4,50,000*
Total volume	*13,00,000*	*12,73,000*

EBIDTA Margin	***FY2019***	***FY2018***
International ($)	*4%*	*8%*
Indian (₹)	*7%*	*9%*

- *The International operations of J Rover have been hit due to ongoing turmoil in UK due to Brexit issues which may have significant impact on the UK headquartered entity. Additionally, the major market for its marquee brands have been in slow lane in China after scorching volume growth due to purchase quotas and shift to Electric vehicles. The USA China Trade Tariff war has escalated and hence it has started impacting the overall volume sold by Chinese Subsidiary. Even in the European market, the diesel scandal and emission norms have put the buyers off and the purchase decisions have been deferred. The regulators have been laying down the roadmap for 100% transition to non-ICE vehicles which warrants investment in new products and technology. The competition from non-Auto OEMs such as Digital and Internet companies offering ride hailing, autonomous cars have changed the ownership narrative for vehicles.*
- *The domestic volumes have been encouraging but the overall market environment is daunting given there is subdued credit growth, NBFC sector hit with liquidity and buyers*

opting for ride hailing rather than to own the car. The competition intensity is also significant with - 10-15 new products introduced p.a. with higher features at lower price points. In the Commercial Segment, the revised axel norms have increased the capacity of existing carriage by 30% hence expected to impact volumes and replacement cycle. The sales have fallen for continuous 12 months in the last year with 30% fall in PV and 25% fall in CV sales month-on-month.

- *Overall, due to slow demand offtake; the inventory has been piling up in the pipeline at dealers and distributors level forcing management to opt for higher discounts for liquidation, production cut· and layoffs. The working capital funding to dealers have also increased disproportionately.*
- *The market price of J Rover Ltd, listed on NSE and BSE, has fallen by 70% over the period of one year from 400 to 120 eroding the market capitalization by - ₹ 35,000 crores.*
- *In order to tide over the difficult conditions, J Rover Ltd has kicked off the 'Project Recharge' with overall outlay of $ 3 billion worth of cost and profit improvements. Of this, $ 700 million was via cut in investments, $ 400 million represented working capital improvement & $ 150 million was saved through workforce reduction in FY 19. From FY 20, reducing 6;000 head-count will yield further $ 400 million cost savings.*
- *The management expects the overall environment to remain challenging for next 1-1.5 years until the political and regulatory stability is achieved. The demand may remain subdued due to multiple factors mentioned earlier.*
- *The focus of management remains firm on new technology investment and innovation in product and service levels. The management continues to tap new emerging markets for its luxury brands and export market for its domestic business. It will leverage the CV market leadership (55%) India to consolidate the position in the passenger vehicle market (5%). It has been at forefront in launching the EV buses in India and EV passenger vehicles across globe. The overall capex spends estimate in the next two years to remain competitive is expected to be $ 5 Bn.*
- *The Parent Entity (45% ownership) of J Rover Ltd is $ 150 Bn entity and has strong patronage, liquidity and brand profile. The financial strength and commitment to J Rover by its parent entity cushions the overall stress. The Parent entity has credit rating of two notches above the sovereign rating.*
- *The Management of J Rover Ltd is mix of highly experienced and diverse individuals from Automotive background with avg. age of 50 with avg. 10 years spent with J Rover.*
- *Annual debt repayment was 3,500 crores in 2019 and ₹ 3,000 crores in 2018. The debt worth $ 3.5 Bn is due for repayment in next 2-3 years.*

- *Current rating of Long-Term Loans is AA+ and Short-Term Loans is AAA.*
- *P & L Statement and Balance sheet o f J Rove for 2019 and 2018 is as below:*

Statement of P & L (₹ in Crores)

Particulars	***FY 2019***	***FY2018***
Sales	*3,00,000*	*2,95,000*
Material Cost	*2,00,000*	*1 ,90,000*
Labour Cost	*35,000*	*30,000*
Other Expenses	*32,000*	*27,000*
	2,67,000	***2,47,000***
EBIDTA	*33,000*	*48,000*
Interest	*6,000*	*5,500*
Depreciation	*24,000*	*22,000*
Amortisation	*4,000*	*3,500*
	34,000	***31,000***
Profit/Loss before exceptional items	***- 1,000***	***17,000***
Impairment Charge	*25,000*	*-*
Profit before Tax	***--26,000***	***17,000***
Tax	*-2,500*	*4,000*
Profit after Tax	***-23,500***	***13,000***

Balance Sheet Details (' In Crores)

Particulars	***FY 2019***	***FY 2018***
Assets		
Net Fixed Assets	*1,60,000*	*1,95,000*
Current Assets		
Debtors	*22,000*	*10,000*
Inventory	*45,000*	*30,000*
Cash & Cash Equivalents	*20,000*	*23,000*
Other Investments	*12,000*	*13,000*
	99,000	***76,000***
Total Assets	***1,59,000***	***2,71,000***

Liabilities		
Share Capital	*1,000*	*1,000*
Reserves	*70,500*	*94,000*
Long Term Loans	*1,10,000*	*90,000*
Vendor Payables	*45,000*	*35,000*
Other Liabilities	*32,500*	*51,000*
Total Liabilities	***2,59,000***	***2,71,000***

Please answer the following:

3.1. *Which one of the below is not the component in CAMEL Model?* ***(2 Marks)***

(A) *Credit*

(B) *Management*

(C) *Assets*

(D) *Liquidity*

3.2. *Each rating obtained by the listed entity w.r.t. the non-convertible debt securities shall be reviewed at least once by a credit rating agency registered by the Board.* ***(2 Marks)***

(A) *In a year*

(B) *Six months*

(C) *In a quarter*

(D) *In every two year*

3.3. *Which one of the following does not fall within the scope of Credit Rating?* ***(2 Marks)***

(A) *Opinion on debt instrument*

(B) *Opinion on IPO*

(C) *Opinion on Commercial Paper*

(D) *Opinion on Holding and Subsidiary companies' transactions*

3.4. *Which of the below event will boost the sovereign credit rating ?* ***(2 Marks)***

(A) *Debt to GDP ratio accelerated in last 2 years*

(B) *The current central government has been third government in the last 2 years*

(C) *Current Ale Deficit has ballooned by 50% as compared to last year*

(D) *GDP growth has been highest in the G7 countries*

3.5. *Sovereign borrowings tend to be at the ……….. yields in the market with the stronger countries paying ……… than the weaker ones.* ***(2 Marks)***

(A) Lowest, higher

(B) Highest, Lower

(C) Lowest, Lesser

(D) Highest, Higher

3.6. *You are required to prepare draft "Credit Rating Rationale" (Report) for J. Rover Automative Ltd. based on the information/data given, which can be put up directly to "Rating Committee" for review and approval. Please prepare "Rationale/Report" in the following manner:*

(A) Evaluation of Business Risk with detailed rationale on Industry Risk, Market Position & Operating Efficiency. ***(4 Marks)***

(B) Evaluation of Management Risk. ***(1 Mark)***

(C) Evaluation of Financial Risk based on solvency, Coverage, Capital Structure & Operation Cycle. ***(4 Marks)***

(D) Evaluation of Parent Support. ***(1 Mark)***

(E) Based on the above calculate "Credit Risk Rating Scoring" for ***(2 Marks)***

(i) Long Term Debt

(ii) Short Term Debt

(F) Final Rating (Action) with articulation for Outlook ***(3 Marks)***

(i) Long Term Debt

(ii) Short Term Debt

Answer to Case Study - 3

3.1 (A)

3.2 (A)

3.3 (D)

3.4 (D)

3.5 (C)

Ans. to 3.6 (A)

1. Industry Risk

The automotive industry is undergoing significant changes across regulatory, customer demand and market structure.

The shift to ACES, emission control norms, demand waning in the context of less ownership and more of on-demand mobility, looming impact of transition to electric vehicles, trade wars and tariff hikes, Brexit Issues – all these have compounded the woes of already ailing industry across globe.

The global economy has been on slower path creating lull in the consumption sectors. The cheap credit and liquidity is available to finance auto purchase decisions have been in shortage.

The technological shift in the auto industry and competition from digital giants has forced incumbents to line up significant capex to create necessary product capabilities and new launches.

J Rover Ltd. faces business risks related to terms on which Brexit is finalized with risk of restrictions on movement of goods and manpower coupled with tariff barriers. Moreover, J Rover Ltd. business profile remains exposed to the threat of imposition of stringent tariffs on auto imports in the US, which may impact volumes and profitability in this key market. CRA will continue to monitor the development on these fronts.

2. Market Position

Domestic Business Comprising both commercial vehicles (CV) and passenger vehicles (PV) have demonstrated significant improvements in market share of profitability, despite market challenges.

In the CV segment, the company is consolidating its position as the largest player with 55% market shares. In PV segment, the company has increased its market share to 5%. The company is focused on achieving healthy volume growth, reduction in costs, better dealer management, improving product portfolio and working capital efficiency. These measures should continue to drive improvement in the company's domestic business over medium term.

J. Rover has iconic brands with a rich heritage in the premium luxury segment. Its strong product development capabilities have enabled successful product launches and expansion into new segments, thus enhancing its product portfolio. This supports diversification of potential growth drivers thereby enhancing company's business profile.

CRA believes that with frequent refreshes, new product launches and further integration of technology; J Rover will continue to improve its product portfolio.

3. Operating Efficiency

J. Rover operating profile is expected to remain constrained by challenging market conditions in tis key markets (China & EU). Moreover, highly competitive markets in North America & China may impact pricing. The effect is already visible I lower volumes in international market although domestic market is a turnaround story EBIDTA margins are eroded in both markets (International as well as domestic) final terms of Brexit could bring in stringent tariffs in USA on auto imports.

The luxury care segment entails large capex, with successive product launches and investment in technology large capex along with constrained profitability will result in negative free operating cash flows. This is likely to result is sustained high leverages CRA will continue monitor success new launches and companies operating leverages.

Management Risk is well within control with strong governance framework and deep sector experienced Board and Executive team. CRA considers this as a strong point in its evaluation.

Alternate Solution to 3.6 A

Credit Rating Rationale Report

(A) Evaluation of Business Risk with detailed rationale on the following:

Industry Risk

(i) Transition to non-ICE vehicles.

(ii) Revised Axel norms

(iii) Slow demand in Auto Sector forcing the management to given higher discounts.

(iv) Shift to ACES across globe. However, shifting to electric vehicles does not gain momentum as it loses Market Share in China.

Market Position

(i) Slow growth internationally due to Brexit issues which affected it UK headquartered entity.

(ii) Market in China slows due to shift to electric vehicles.

(iii) In the European market, sales affected due to diesel scandal and emission norms.

(iv) Domestic volume also affected due to subdued credit growth, liquidity problems in NBFC etc.

(iv) Increasing competition with introduction of 10-15 new products and from non-auto OEMS.

(v) Inventory piling up due to slow demand.

(vi) Erosion of Market Capitalization due to 70% falls over one year.

Operating Efficiency

It is not good as the figure of Profit before Tax and Profit after Tax are in negative. Overall volume has been increased but market environment is to encouraging. But the "Project Recharge" may improve the situation in 2020.

Further, international operations hit due to Brexit issues. Overall volume impacted due to USA China Trade Tariff war.

So, there is risk in operational efficiency which needs urgent attention.

Ans. to 3.6 (B) Evaluation of Management Risk

It is doing well as it has got a right mix of highly experienced and diverse individuals from automotive background. It is also continuing to tap new emerging markets for it luxury brands and export market for is domestic business.

Ans. to 3.6 (C) Evaluation of Financial Risk

Solvency

(i) Current Ratio **2019** **2018**

$$= \frac{\text{Current Assets}}{\text{Current Liabilities}} \qquad \frac{87,000}{77,500} \qquad \frac{63,000}{86,000}$$

1.12 : 1 **0.73 :1**

Alternatively, if candidates have assumed Other Investments as part of current assets then ratio shall be computed as follows:

$$= \frac{\text{Current Assets}}{\text{Current Liabilities}} \qquad \frac{99,000}{77,500} \qquad \frac{76,000}{86,000}$$

1.28 : 1 **0.88 :1**

(ii) Acid Test Ratio

$$= \frac{\text{Liquid Assets}}{\text{Current Liabilities}} \qquad \frac{42,000}{77,500} \qquad \frac{33,000}{86,000}$$

0.54:1 **0.38 : 1**

Alternatively, if candidates have assumed Other Investments as part of liquid assets then ratio shall be computed as follows:

$$= \frac{\text{Liquid Assets}}{\text{Current Liabilities}} \qquad \frac{54,000}{77,500} \qquad \frac{46,000}{86,000}$$

0.70:1 **0.53 : 1**

Comment: Although there is an improvement in both ratios but lagging the general benchmark of 2 : 1 for Current Ratio and 1 : 1 for Quick Ratio.

Coverage

(i) Interest Coverage Ratio

	2019	2018
$= \dfrac{\text{EBIT}}{\text{Interest Expense}}$	$\dfrac{5,000}{6,000}$	$\dfrac{22,500}{5,500}$
	0.83 times	**4.09 times**

(ii) Debt Service Coverage Ratio

	2019	2018
$= \dfrac{\text{Net Operating Income}}{\text{Total Debt Service}}$	$\dfrac{33,000}{9,500}$	$\dfrac{48,000}{8,500}$
	3.47	**5.65**

Alternatively, if candidates have reduced tax payment from Operating Income then ratio shall be computed as follows:

$= \dfrac{\text{Net Operating Income}}{\text{Total Debt Service}}$	$\dfrac{30,500}{9,500}$	$\dfrac{44,000}{8,500}$
	3.21	**5.18**

Comment: Both of these ratios decresed significantly in one year. In fact, interest coverage ratio has fallen below 1 indicating that J Rover may not be able to meet its interest payments from operational cash flows.

Capital Structure (Debt-Equity Ratio)

	2019	2018
$= \dfrac{\text{Debt}}{\text{Equity}}$	$\dfrac{1,10,000}{71,500}$	$\dfrac{90,000}{95,000}$
	1.54:1	**0.95:1**

Alternatively, candidates can also compute this ratio as follows:

	2019	2018
$= \dfrac{\text{Debt}}{\text{Debt + Equity}}$	$\dfrac{1,10,000}{1,81,500}$	$\dfrac{90,000}{1,85,000}$
	0.61:1	**0.49:1**

Comment: Debt profile has worsened with the Debt Equity ratio going up.

<u>**Operating Cycle**</u>	**2019**	**2018**
(i) Debtors Collection Period		
$= \dfrac{\text{Average Debtors}}{\text{Credit Sales}} \text{x}\, 365$	$\dfrac{22,000}{3,00,000} x365$	$\dfrac{10,000}{2,95,000} x365$
	27 days	**12 days**
(ii) Inventory Holding Period	**2019**	**2018**
$= \dfrac{\text{Inventory}}{\text{Cost of Sales}} \text{x}\, 365$	$\dfrac{45,000}{2,95,000} x365$	$\dfrac{30,000}{2,72,500} x365$
	56 days	**40 days**

Alternatively, if candidates assume Depreciation and Amortization does not form the part of Cost of Sale then this ratio can also be computed as follows:

$= \dfrac{\text{Inventory}}{\text{Cost of Sales}} \text{x}\, 365$	$\dfrac{45,000}{2,67,000} x365$	$\dfrac{30,000}{2,47,000} x365$
	= 62 days	**44 days**
(iii) Creditors Payment Period		
$= \dfrac{\text{Trade Payables}}{\text{Cost of Sales}} \text{x}\, 365$	$\dfrac{45,000}{2,00,000} x365$	$\dfrac{35,000}{1,90,000} x365$
	= 82 days	**67 days**
(iv) Operating Cycle Period		
= Inventory Holding Period	56 + 27	40 + 12
+ Debtors Collection Period	**= 83 days**	**= 52 days**
	Or	
= Inventory Holding Period	62 + 27	44 + 12

+ Debtors Collection Period	**= 89 days**	**= 56 days**

(v) Net Operating Cycle

= Inventory Holding Period	83 – 82	52 - 67
+ Debtors Collection Period	**= 1 days**	**= -15 days**
- Creditors Payment Period		

Or

= Inventory Holding Period	89 – 82	56 - 67
+ Debtors Collection Period	**= 7 days**	**= -11 days**
- Creditors Payment Period		

Comment: These ratios clearly shows stress on Operation due to higher inventory holding period, increased receivable period and delayed vendor payment.

Ans. to 3.6 (D)

Evaluation of Parent Support

No significant risk seems to be visible from Parent Support as the parent entity has strong patronage, liquidity and brand profile. Moreover, the parent entity has credit rating of two notches above the sovereign rating.

Ans. to 3.6 (E)

Credit Risk Rating – Scoring

Based on all the above comments, each risk is benchmarked on a scale of 1 to 5 with 5 being the riskiest and 1 being safest.

Credit Risk Rating Scoring for Long Term Debt

Risk Category	Ranks	Weights (Given)	Weighted Risk
Business Risk	4	30%	1.2
Management Risk	2	20%	0.4
Financial Risk	4	35%	1.4
Parent Support	2	15%	0.3
Total Credit Rating Score			**3.3**

Credit Risk Rating Scoring for Short Term Debt

Risk Category	Ranks	Weights (Given)	Weighted Risk
Business Risk	3	30%	0.9
Management Risk	1	20%	0.2
Financial Risk	3	35%	1.05
Parent Support	1	15%	0.15
Total Credit Rating Score			**2.30**

Alternative Solution to 3.6 (E)

Evaluation of Business Risk:

Sector Analysis: The automotive sector is in a transition stage from emission vehicles to electric vehicles. In terms of the existing product profile, there is bound to be downward sales trend and lesser demand. The piling inventories is an indication that sales are likely to be gloomy, which is appreciated by the company and hence the huge investment in the newer technology to produce electric vehicles. Already a product leader, it will be easy for the vehicle across all segments. The head wind could be hanged into an opportunity if it comes out in time with adequate number of electric vehicles. The car hailing activitics is not a threat, but an opportunity to sell more electric cars even for taxi operators. In fact, sales will be more than normal domestic demand. The company has to only act swiftly in disposing its existing inventory even if it means substantial price cut. On page 17, para 2, it is stated that domestic volumes are encouraging, but this is not translated into an appropriate figure in the sales value column of the P & I. Hence it is safely understood that with the encouraging domestic volumes, all the existing stock would be sold at a decent price. It will be able to release the funds blocked in these investments. Production of older models should almost be discontinued and the new generation EVs should be produced. The inventory accretion of 15000 crores may not all be finished goods. It must include material and not-yet assembled parts. These could be used in the new products and the finished old products must be disposed of with price cuts. If the company is also thinking on these lines, this environment need not be treated as a business risk but be converted into a business opportunity. If the company has no proper plans in place, it is bound to suffer the consequences. As an analyst, one should find out by speaking to the appropriate persons of the company and evaluate this risk. From the data on page 18, it appears that the company is in fact heading in this direction and therefore as an analyst, I would not rate this as a threat and come down on my rating.

This is further strengthened by the fact that even in the past; the vehicles were frequently subjected to fulfilling upgraded emission norms. Earlier versions of the vehicles were stopped and phased out. J Rover Ltd. Seems to have been successful in overcoming theses transitions.

Therefore, there is no compelling reason to say that the transformation into electrical vehicles manufacture is the path to its deterioration.

Capital Market environment: The loss was mainly due to the impairment write off. Fall in profits and the general industry slow down would have impacted the market price to a great extent. Unless the sales and profits rise substantially, the market price is not likely to gain any ground.

Strategic planning: The company seems to have a good strategic plan for revival and growth by investing $5 bn in the next two years to overcome competition and leverage the CV market leadership in India and consolidate its PV market.

Parent company support: This is very strong, since the cash rich parent has 45% ownership. The parent owns ratings above the sovereign rating and will definitely provide funds for nourishing J Rover Ltd.

Management: This factor is key to success of an enterprise. The company's management has proven its success and maybe expected to continue to do so, given good support from parent, having been able to retain many experienced individuals for a long term. This leads one to seeing zero risk in management.

SEBI has rationalized the rating by different agencies and has prescribed symbols for different degrees of rating.

The agency's name has to be prefixed; hence old rating would have been XX AA+.

There is no AAA+ for short term instrument. It must be A1 i.e. XX A1 Both are being retained. Put on watch for frequent (say monthly) review.

Financial parameters: The interest coverage ratio has fallen substantially. This is mainly due to the impairment write off. If not, the position will not be that dismal. This low ratio only means that after abnormal write off, the earning was not sufficient to repay interest. If the impairment was written off last year, the case would have been much similar. However, since reserves exist and the company is not excessively geared, we need not expect a default in debt servicing – whether of principal or interest, as the debt service coverage is not alarming. However, with due respects to the financial parameters, the rating may be unchanged, but put on watch. On the operations side, we know that inventory and debtors are higher and debtors will still rise, if the company endeavours to sell of its inventory.

My score would be as follows (Both long & short term)

Risk category	**Rank**	**Weights**	**Weighted Risk**
Business risk	2	30%	0.6
Management Risk	1	20%	0.1

Financial Risk	2	35%	0.7
Parent Support	1	15%	0.15
Total			**1.55**

3.6 (F)

Final Rating with articulation for Outlook

Based on the detailed review done above such as:

(a) Evaluation of Business Risk (including Industry Risk, Market Position & Operating Efficiency)

(b) Management Risk

(c) Financial Risks (including Solvency Coverage, Capital Structure & Operating Cycle)

(d) Parent Support

Resultant Credit Risk Rating Score have been arrived at for bank Long term as well as Short Term Debts.

Based on the same Ratings have been revised as follows:

Long Term Rating-

CRA – AA – (Outlook revised from AA+ to AA-)

Short Term Rating

CRA – AA + (Outlook revised from AAA to AA-)

<u>Outlook</u>

Negative – (i) Constrained profitability in the medium term.

(ii) Challenging market conditions well continue impact India & International demand

(iii) Project Recharge (Expenditure monitoring project) should start giving some positive results but would take time to see its effect.

(iv) Adverese outcome on Brexit impacting UK Volumes.

(v) Sustained high levels of debt and coverage related ratios.

Alternative Solution to 3.6 (F)

Short term instrument: Outlook may not be stated as per SEBI circular.

Long term instrument:

Positive – Adequate business opportunity for new product introduction and growth good, sizeable and timely investment to grab the market with the latest compliant product, which may not be available for new market entrants good parent support with adequate liquidity and financial standing high possibility of self-sustained growth with investment already in place, with little need to depend more on parental support.

Existing scenario reveals no default in debt servicing. Hence no need to decrease the rating on alarm.

SEBI mandates that a no default statement be taken from the entity on a monthly basis. If this has no entry to record any default, rating may instantly be revised and para meters re-looked at.

The question requires a rating for the proposed addition of ₹ 1000 Crore to the short term working capital and ₹ 2500 Crore long term bank finance. Both these as per the regulations issued in 2018 by SEBI will fall under long term requirements. They will retain the present rating of AA+ and the CRA may put the performance on principal watch.

CASE STUDY 4

Arjun and Lakshman are students who have enrolled themselves for Graduation in Financial Services and Capital Markets in the University of Chicago. As part of this curriculum, both Arjun and Lakshman will be covering various aspects including Global financial markets, policy making and impact of policies, role of capital markets, institutions and intermediaries in capital markets, commodity markets, banking operations etc. amongst other things.

Whilst their focus during the study is largely global, Mr. Derek, their professor presents a paper for discussions amongst the professor community and fellow students. Mr. Derek mentioned that, India, as a country is going through a significant development in recent years and a number of new initiatives and policies have been undertaken currently. He also mentioned that, the economy in India is also seeing a slowdown currently and there could be an impact on the overall growth and output from industries.

Given the above, Mr. Derek mentioned to Arjun and Lakshman that, it will be of great interest and a source of knowledge for the students to understand the way the Indian financial services and capital markets are structured, in what way are the aspects fundamentally different from some of the global markets and their high level views on some of the policies nd happenings in the market.

Both Arjun and Lakshman were super excited with this opportunity and realized that this is also a great opportunity to understand the Indian financial system in a better manner. As they started to prepare for the same, some of the aspects Mr. Derek wanted them to consider included the below items:

Global trends in capital markets *- He particularly mentioned that technology plays an important role in evolution of the global capital markets recently.*

Regulators *in the financial markets and how those are different when compared to the regulators in India. For this purpose,*

- *Mr. Derek wanted both Arjun and Lakshman to focus on two of the main regulators in India in comparison to the Securities Exchange Commission (SEC) and the Fed in the US and why their operation strategies are different.*
- *In one of the conversations duril\g the discussions which Arjun had with Mr. Derek, Arjun mentioned that he sees no reason why the Reserve Bank of India (RBI) should be any different when it comes to its approach as the Central Bank, in comparison to the approach of Fed. He said the Indian policy-makers need to just replicate the Fed in terms of its approach rather than customizing their decisions for India.*
- *Mr. Derek listened to Arjun but prompted Lakshman to look into the views of Arjun and share his thoughts with Mr. Derek.*

Credit policy: *Mr. Derek wanted both Arjun and Lakshman to look into what credit policy means· in the context of the Indian economy, what would be the main objectives and analyze the same in greater detail.*

- *He said that for the purposes of the discussion, they should also analyze the credit policies adopted by some of the other emerging economies such as Brazil and South Africa and include the same in their overall analysis as this will help the students understand the concepts better.*
- *He was also prompting Arjun to look into the tools and policy objectives of Fed in the above context and how is that different when it comes to the overall elements of credit policy.*

Computation of following indexes: *Mr. Derek wanted Arjun and Lakshman to look into:*

- *Cost inflation index and how is the same to be computed.*
- *Consumer price index and how is this to be arrived at.*
- *Wholesale price index and how is that used.*

Determination of interest rates*: Mr. Derek was very particular that Arjun and Lakshman understand and analyze the determination of interest rates in greater detail. He was keen for them to let the larger student community know, how in India the interest rates are regulated & how interest rates are determined. He said it would be great if both of them can also look at the regulation of interest rates in some of the comparable global economies and how is that different when it comes to India. Specifically, few of the aspects to be considered included:*

- *Libor*
- *Mibor*
- *T Bills of Government*
- *G-Sec etc.*

Arjun was also keen that during this analysis, he wanted to analyze and cover some of the developments in the last few years in the form of ***debt securitization*** *and* ***money market mutual funds.*** *He said securitization is the buzz word in some of the recent money market evolution and this would be of huge value to the student community to understand.*

Institutions and intermediaries *: Lakshman normally shows keen interest in understanding the role played by various institutions and intermediaries in· the functioning of the capital markets and he did not want to let go of this chance to deep dive in understanding this better in the context of India. In particular, he told Arjun that he will take the lead in analyzing and presenting the following:*

- *Depository system*
- *Stock and commodity exchanges*
- *Intermediaries*
- *Institutional investors such as the merchant bankers, registrars to an issue, underwriters, bankers and debenture trustees*
- *FPIs*
- *Custodians*
- *Clearing houses*

Arjun for his part mentioned that his interest in ***commodity markets*** *is known to everyone and he will, accordingly take lead in analyzing the commodity markets in India and compare the same with the Global Practices. He said he will look into the key Indian commodity markets such as the MCX and NCDEX which comprise the trading platforms in India and also analyze how they operate.*

- *Arjun also indicated that he will look at the problems associated with the Indian commodity markets and understand the application of derivatives in commodities. In particular, he mentioned that the Indian commodity market is plagued by :*
  - ➢ *High speculation and fly by night operators*
  - ➢ *Trading without underlying*
  - ➢ *Lack of exponential growth that is required for the platforms to sustain it*

- *Lack of connect of the farmers to the market*
- *Political ramifications*

- *He said that whilst a future trading is exciting, it comes with certain specific conditions such as durability, homogeneity, free from control and frequent trading and this isn't always the case in a market such as India for all the key products.*

Both Arjun and Lakshman held a discussion with Mr. Derek outlining the various aspects that they will be covering during the presentation. Mr. Derek was very impressed with the aspects identified though he mentioned that many of these aspects were arising out of the discussions they had with Mr. Derek himself.

Mr. Derek indicated to both Arjun and Lakshman that he will have a short discussion with them where he will ask them a few questions for them to respond to and also provide them with his additional thoughts questions so that they are better prepared for the final discussions and presentation. They are as follows :

4.1 *Which technology is deployed to remove inefficiencies in the current international capital market structure by enabling capital market firms to create digital assets for private securities which will help in direct and immediate access by regulatory bodies ?*

(2 Marks)

(A) Private Securities Blockchain Solution

(B) Robotic process automation

(C) Blockchain and Robotic process automation

(D) SAP

4.2 *Liquidity is controlled in the economic system by:* ***(2 Marks)***

(A) The RBI by resorting to sale of securities at times of excess liquidity

(B) The RBI by resorting to purchase of securities at times of excess liquidity

(C) The RBI through buying securities at times of tight liquidity

(D) The Government through buying securities at times of tight liquidity

4.3 *Quantum channel relating to money supply and credit comprise of:* ***(2 Marks)***

(A) Bank lending channel and balance sheet channel

(B) Bank lending channel and credit channel

(C) Bank lending channel and exchange rate channel

(D) Bank lending channel and asset price channel

4.4 *Repo and Reverse Repo instruments used by RBI for:* ***(2 Marks)***

(A) Under Repo, the RBI borrows from the commercial banks and under Reverse Repo, commercial banks borrow from RBI

(B) Under Repo, the RBI lends to commercial banks and under Reverse Repo, RBI borrows from commercial banks

(C) Under Repo, the RBI borrows from the commercial banks and under Reverse Repo, commercial banks lend to RBI

(D) Under Repo and under Reverse Repo, commercial banks borrow from the RBI

4.5 *The regulation of commodity derivatives market is by:* ***(2 Marks)***

(A) Securities and Exchange Board of India under Securities Contracts Regulation Act (SCRA), 1956

(B) Securities and Exchange Board of India under Forward Contracts Regulation Act (FCRA)1952

(C) Reserve bank of India

(D) Forward Markets Commission under Forward Contracts Regulation Act

4.6 *Please write a Note for Students in the University of Chicago, explaining the following:*

(A) The key elements of financial markets and what are the main functions of financial markets in India? ***(2 Marks)***

(B) What are the various instruments of credit policy prevalent? ***(2 Marks)***

(C) What are the basic differences between Wholesale price index and consumer price index ? Elaborate on the same with examples. ***(3 Marks)***

4.7 *Is Arjun right in his view on the approach adopted by RBI in comparison to Fed? What do you think should be the response that Lakshman provide to Mr. Derek?* ***(3 Marks)***

4.8 *Do you agree with Arjun's view on the problems in commodity markets in India? What do you think is the required solution for the same?* ***(2 Marks)***

4.9 *Analyze whether futures trading on a commodity exchange is possible for the below products - explain stating why?* ***(3 Marks)***

- *Petrol*
- *Zinc*
- *Pulses*

Answer to Case Study: 4

4.1 (A)

4.2 (A)

4.3 (A)

4.4 (B)

4.5 (A)

Ans. to 4.6 (A)

The key elements of the financial markets are:

- Foreign exchange market
- Capital market
- Money market

The main functions of financial markets are enumerated as below:

(1) To facilitate creation and allocation of credit and liquidity.

(2) To serve as intermediaries for mobilization of savings.

(3) To help in the process of balanced economic growth.

(4) To provide financial convenience.

(5) To provide information and facilitate transactions at low cost.

(6) To cater to the various credits needs of the business organizations.

Ans. to 4.6 (B)

The various credit policy instruments are explained in the following paragraphs:

(i) Cash Reserve Ratio (CRR)

Cash reserve ratio is the amount which the commercial banks have to maintain as cash deposit with the Reserve Bank of India. RBI may increase the CRR if it thinks that there is large amount of money supply in the economy. Conversely, it will decrease the CRR if it is of the opinion that inflation is in control and the industry needs a monetary boost up.

(ii) Statutory Liquidity Ratio (SLR)

Statutory Liquidity Ratio is the amount which commercial banks have to keep it with itself. To encourage industries to boost up their production, SLR may be decreased to put more money in the hands of commercial banks. An increase in SLR is used as an inflation control measure to control price rise.

(iii) Liquidity Adjustment Facility (LAF)

Under this facility, the commercial banks can borrow from RBI through the discount window against the collateral of securities like commercial bills, treasury bills or other eligible papers. Currently, the RBI provides financial accommodation to the commercial banks through repos/reverse repos under the LAF.

(iv) Margin Standing Facility (MSF)

Margin Standing Facility announced by the Reserve Bank of India (RBI) in its Monetary Policy, 2011-12 refers to the facility under which scheduled commercial banks can borrow additional amount of overnight money from the central bank over and above what is available to them through the LAF facility upto a limit at a penal rate of interest.

The minimum amount which can be assessed through MSF is ₹ 1 crore and more will be available in multiples of ₹ 1 crore. The MSF would be the last resort for banks once they exhaust all borrowing options including the liquidity adjustment facility on which the rates are lower compared to the MSF.

(v) Market Stabilization Scheme

Under the market stabilization scheme, the Government of India borrows from the RBI and issues treasury bills/dated securities for absorbing excess liquidity from the market arising from large capital inflows. (vi) Open Market Operations

(vi) Open Market Operation

It is basically a tactic employed by the RBI to control the liquidity in the economic system. When the RBI feels there is excess liquidity in the market, it resorts to sale of securities thereby reducing excess rupee flowing in the Indian economy. Similarly, when there is tight liquidity situation in the economy, the RBI will buy securities from the market, thereby releasing money (rupee) into the system.

Ans. to 4.6(C)

WPI reflects the change in average prices for bulk sale of commodities at the first stage of transaction while CPI reflects the average change in prices at retail level paid by the consumer.

The prices used for compilation of WPI are collected at ex-factory level for manufactured products, at ex-mine level for mineral products and mandi level for agricultural products. In contrast, retail prices applicable to consumers and collected from various markets are used to compile CPI.

The reasons for the divergence between the two indices can also be partly attributed to the difference in the weight of food group in the two baskets. CPI Food group has a weight of 39.1

per cent as compared to the combined weight of 24.4 per cent (Food articles and Manufactured Food products) in WPI basket.

The CPI basket consists of services like housing, education, medical care, recreation etc. which are not part of WPI basket. A significant proportion of WPI item basket represents manufacturing inputs and intermediate goods like minerals, basic metals, machinery etc. whose prices are influenced by global factors but these are not directly consumed by the households and are not part of the CPI item basket.

Thus even significant price movements in items included in WPI basket need not necessarily translate into movements in CPI in the short run. The rise or fall in prices at wholesale level spill over to the retail level after a lag.

Similarly, the movement in prices of non-tradable items included in the CPI basket widens the gap between WPI and CPI movements. The relative price trends of tradable vis a vis non-tradable is an important explanatory factor for divergence in the two indices in the short term.

Ans. to 4.7

It seems that Arjun is not right in his approach when he reasoned that RBI should replicate Fed in terms of its approach. The response of Lakshman to Mr. Derek should be that Federal Reserve (Fed) in the USA's policies is primarily driven by growth and employment figures, at the expense of inflation. On the other hand, we have the RBI, whose policies are primarily driven by inflation, at the expense of growth. So which approach is better depends upon the situation of the economy.

In the USA and European Union, where rate of interest is very low encourages the industry to borrow at cheaper cost and contributes towards economic development and growth. However, in India, the aim of RBI is to keep the rate of interest high to discourage the industry to borrow large amount of money and consequently to contain inflation.

Ans. to 4.8

Yes, I agree with Arjun's view.The Indian markets have been plagued by the 'speculator' and 'fly-by-night' operators. The Chairman of the now defunct NSEL (National Spot Exchange Limited) had to be arrested for having entered into futures markets without adequate documentation – many commodities that were traded didn't have any underlying to them. SEBI has passed tough strictures on fresh forward contracts in the commodity markets in Feb 2016, and it has derecognized OTCEI (Over-the-counter exchange of India).

Another big problem is that the commodity markets have not been able to see the 'exponential' growth that is required for platforms to sustain it. The basic problem is of 'inclusion' – farmers that form the backbone of agri-based commodities are not able to connect to the market, even though both MCX and NCDEX have created several awareness programs towards the same.

Political ramifications have also added to the woes – price sensitive commodities like sugar have been on and off the futures platform.

Required solution for the same

Needless to say, the commodity markets in India have a long way to go to becoming globally competent. There is a persisting need to close the chain between farmers to markets, which is even more challenging given that the hold of intermediaries is too strong in Indian scenario. An impetus from the government is also required in order to both educate and popularize the adoption of commodity markets in India.

Alternative Solution to 4.8

The commodities market in India has been growing and has more products traded in the different commodities exchanges. More regulations are in place to ensure delivery in the case of deliverable contracts including regulations on warehousing. Contracts other than ready delivery contracts come under the scope of the definition of commodity derivatives and are w.e.f. 2015, being controlled and supervised by SEBI under the Commodities derivatives segment. The Finance Act 2015 has been amended to include commodity derivatives under SEBI. The FCRA has been repealed. These have been done to exactly take care of the inadequacies observed by Arjun, viz. high speculation and fly by night operators, trading without underlying lack of growth and a suitable trading platform. These aspects have been taken care of by adequate margins being prescribed in the commodities segment, more net worth demands on the brokers on the commodity exchange platform, regulations by SEBI addressing various safeguards necessary in addition to prescribing risk management norms by means of master circular, guidelines and regulations. Penalties are imposed for violation of norms, just as in the equity derivative segments.

However, the lack of connect of farmers to market cannot merely be addressed by law. Literacy programs, though in place by SEBI to create awareness of farmers can avail of is yet to take widespread effect to fully utilize the system. This is because of the basic illiteracy that prevails in the rural areas.

Political ramifications are common to all segments and not restricted to commodities, though agricultural produce is more influenced by government politics and intervention and is bound to have more political influence on the demand and supply conditions and hence the prices.

The other drawbacks of the commodity market segment is the storage, deterioration in quality when stored, lack of income like dividend in the interim period of holding, delivery costs and possible losses, gradeability, etc.

Ans. to 4.9

Petrol – SEBI is considering to allow futures trading in petrol. Globally, petrol is traded on Nymex and ICE exchanges.

Zinc – Futures trading is already going on.

Pulses – Currently, no trading in pulses. But trading is possible because with futures, farmers have better idea of likely future market conditions and they can lock in/hedge future prices.

Alternative Solution to 4.9

Petrol – No, price controlled and regulated and hence and not possible.

Zinc - Yes, possible as it meets all conditions of Durability, Homogeneity, free from control and frequent trading.

Pulses – Yes, possible as it meets all conditions of Durability, Homogeneity, free from control and frequent trading.

CASE STUDY 5

You are a Partner in M/s. Advisor & Co., a firm of Chartered Accountants which specializes in providing advisory services to its clients on investments in mutual funds and also provides advice on fund raising etc.

Recently, Innovate Limited, promoted as a tech startup, has approached you in providing some advice in respect of its investments as well as its funding requirements. You had a meeting with Mr. Satya Prakash, the MD of the Company who has provided the below facts to you:

- *The Company is involved in providing niche solutions in the customer management space for its customers through innovative solutions and technologies.*
- *The company has grown exponentially in the recent past and many of its customers are based out of the US and China. It also has further plans to grow and also to raise some funds by attracting potential investors.*
- *The Company has a huge cash balance in its Indian bank account and has retained the same as part of its current account balance and fixed deposits for a considerable period of time. The MD mentioned that he has heard about mutual funds, but is not sure if corporate entities can invest in mutual funds. He is also not too sure on which types of funds to choose, both from a risk and a return perspective.*
- *On the Mutual funds, the MD mentioned that he has heard some experiences of few of his start-up friends in other entities who have lost a considerable amount due to the effect of some large infrastructure companies failing and as such, wanted to avoid that scenario. He, therefore, wanted some inputs on factors to consider in selection of mutual funds.*

- *The MD wanted advice regarding venture capital funding for Innovate and also the types of funding that would be available and its suitability.*
- *The MD mentioned that the Company is currently in the stage of enhancing its market and expanding further as it has been a year since it has broken-even.*
- *He is also exploring options for a long term loan from banks, but since that may take a while, a temporary option of funding from a venture capital is also being explored.*
- *He does not prefer a mode where the venture capitalist has a say in the affairs of the company nor does he want them to acquire any stake in the entity.*
- *He has seen some of his fellow startups obtain mezzanine funding from the VCs, and he is keenly evaluating that as a possibility, he could consider.*

- *The MD was also keen in knowing whether they can issue debt instruments such as debentures for the purpose of raising funds. He mentioned that he is keen in exploring this option and also get the debenture listed in a stock exchange.*

  But he wanted to understand what the additional compliance requirements on account of listings are.

- *One of the aspects that the MD is evaluating is also to scale up its support activities such as finance, administration; HR etc., as it is currently run by a few individuals. .He was curious to know if, there is a mandatory law which forces them to recruit qualified professionals or they can continue to run the company the way it is currently being managed.*

- *The MD provided you with additional facts of the business :*
  - *The company has about 600 employees currently*
  - *It operates from 3 locations in India and has sales offices abroad*
  - *The Company's ERP is a home grown ERP and they plan to move to a cloud based solution*
  - *The finance team is currently only 4 people and they follow cash basis of accounting*
  - *As much as the MD wants to scale up operations, he is also cost conscious and does not want to unnecessarily incur additional costs in manpower.*
  - *He also wanted to check if outsourcing of the finance, treasury and accounts operations is an option.*
  - *Since a major portion of revenues come from abroad, he was keen in knowing applicability of those regulations to the entity.*

The MD mentioned, given the above information, he would like you to prepare a brief report addressing some of his questions and meet up with him in a week's time.

5.1 *The maximum cost that mutual funds can incur is____and any extra cost is borne by* ***(2 Marks)***

(A) 2.5% of the portfolio and extra cost is borne by the investor

(B) 2.5% of the portfolio extra cost is borne by the underlying companies in which mutual funds invest

(C) 2.5% of the portfolio and extra cost is borne by the asset management company

(D) 3% and extra cost is borne by the investors

5.2 *Which of the below ratios is an appropriate measure of performance for an overall portfolio particularly when it is compared to another portfolio or another index such as S&P 500, Small Cap Index etc.* ***(2 Marks)***

(A) Treynor Ratio

(B) Jensen's Alpha

(C) Sharpe Ratio

(D) Net asset value

5.3 *A financing mode which is typically a hybrid of debt and preferred stock finance is known as :* ***(2 Marks)***

(A) Early stage funding

(B) Working capital loan

(C) Mezzanine funding

(D) Expansion funding

5.4 *Since they need to bear extremely high risks, their rate of returns are the highest. Which category is this?* ***(2 Marks)***

(A) Angel investors

(B) Venture capital funds

(C) Mutual funds

(D) Investment banks

5.5 *Credit ratings once issued:* ***(2 Marks)***

(A) Need not be revised as this is given at a point in time

(B) Needs to be revised periodically irrespective of whether the rating has changed

(C) Rating agency shall during the lifetime of the securities rated by us, continuously monitor the rating of such securities and carry out periodic reviews of all published ratings

(D) Rating agencies will need to revise it on a quarterly basis.

5.6 *Please prepare a detailed Note for MD of Innovate Limited., summarizing the following :*

(A) The advantages of investing in a mutual fund. ***(2 Marks)***

(B) What would be the factors you would advise the MD before selecting the right mutual funds to invest in for short term tenor of Investments as well for Long Term tenor of Investments ? ***(3 Marks)***

(C) Provide your inputs on the various types of funding by a venture capitalist. And which mode will be best suitable to Innovate Limited? ***(6 Marks)***

5.7 *Please advise if Innovate Limited, can issue debt rather than raise further capital. And what additional regulations are to be considered for listing and is Innovate Limited currently geared up to meet the requirements?* ***(4 Marks)***

Answer to Case Study: 5

5.1 (C)

5.2 (C)

5.3 (C)

5.4 (A)

5.5 (C)

Ans. to 5.6 A

Note to MD of Innovate Ltd.

The advantages of investing in mutual funds.

(a) Professional Management: The funds are managed by skilled and professionally experienced managers with a back up of a Research team.

(b) Diversification: Mutual Funds offer diversification in portfolio which reduces the risk.

(c) Convenient Administration: There are no administrative risks of share transfer, as many of the Mutual Funds offer services in a demat form which save investor's time and delay.

(d) Higher Returns: Over a medium to long-term investment, investors always get higher returns in Mutual Funds as compared to other avenues of investment.

(f) Liquidity: In all the open ended funds, liquidity is provided by direct sales / repurchase by the Mutual Fund and in case of close ended funds, the liquidity is provided by listing the units on the Stock Exchange.

(g) Transparency: The SEBI Regulations now compel all the Mutual Funds to disclose their portfolios on a half-yearly basis.

(h) Other Benefits: Mutual Funds provide regular withdrawal and systematic investment plans according to the need of the investors. The investors can also switch from one scheme to another without any load.

(k) Flexibility: There are a lot of features in a regular mutual fund scheme, which imparts flexibility to the scheme. An investor can opt for Systematic Investment Plan (SIP), Systematic Withdrawal Plan etc. to plan his cash flow requirements as per his convenience. The wide range of schemes being launched in India by different mutual funds also provides an added flexibility to the investor to plan his portfolio accordingly.

Alternate Solution to 5.6 A

Advantages of investing in a mutual fund:

Innovate Ltd is not in the business of finance and is said to have a lean team. Hence directly supervising and reacting based on market triggers is not feasible for Innovate. Hence, it could decide its strategy and preference- in which sector it should invest and the expected returns, safety of capital, period of investment, etc. and then invest in the appropriate mutual fund.

It can choose to replicate a certain index, or to invest in a certain sector, or prefer to withdraw, or not to watch the market for a brief while by investing in an appropriate mutual fund. The funds are now rationally classified and it means the same thing across investors. It can choose a fund, and within it, a scheme that matches its investment objective.

Mutual funds have a variety of schemes catering to investment objectives of safety, liquidity, stability, constant income, growth, etc., with SEBI having a close watch with its special regulations. Moreover, the diversity of ownership in a fund makes it watched over by many interested parties that the risk of the fund is also mostly minimised by diversification.

All this comes for a small fee, for which also the ceiling is prescribed. Hence mutual funds have more advantages than individual investments.

5.6 B

I would advise MD following factors:

(1) Past Performance – The Net Asset Value is the yardstick for evaluating a Mutual Fund. The higher the NAV, the better it is. Performance is based on the growth of NAV during the referral period after taking into consideration Dividend paid.

Growth = (NAV1 – NAV0) + D1 / NAV0.

(2) Timing – The timing when the mutual fund is raising money from the market is vital. In a bullish market, investment in mutual fund falls significantly in value whereas in a bearish

market, it is the other way round where it registers growth. The turns in the market need to be observed.

(3) Size of Fund – Managing a small sized fund and managing a large sized fund is not the same as it is not dependent on the product of numbers. Purchase through large sized fund may by itself push prices up while sale may push prices down, as large funds get squeezed both ways. So it is better to remain with medium sized funds.

(4) Age of Fund – Longevity of the fund in business needs to be determined and its performance in rising, falling and steady markets have to be checked. Pedigree does not always matter as also success strategies in foreign markets.

(5) Largest Holding – It is important to note where the largest holdings in mutual fund have been invested.

(6) Fund Manager – One should have an idea of the person handling the fund management. A person of repute gives confidence to the investors.

(7) Expense Ratio – SEBI has laid down the upper ceiling for Expense Ratio. A lower Expense Ratio will give a higher return which is better for an investor.

(8) PE Ratio – The ratio indicates the weighted average PE Ratio of the stocks that constitute the fund portfolio with weights being given to the market value of holdings. It helps to identify the risk levels in which the mutual fund operates.

Alternate solution to 5.6 B

Factors to select the right mutual fund:

- Short and Long term tenors
- Safety of capital
- Diversification of risk by the fund's investment
- Composition of the investments of the fund – whether they replicate a safe index or a risky mixture with fluctuating NAVs
- Fund managers, their competence and experience
- Investment objectives of funds- whether they are aligned to the company's objectives
- The CAGR and riskometer parameters.
- Variablility of the returns, the betas of the portfolios.
- Switchover facilities
- Average yields compared to the benchmark yields.

Short term special parameters:

- Lock in period
- Open ended schemes or exchange traded funds to provide for liquidity
- Entry values of NAV- If these are high, yield is bound to be low. Hence point of entry into the scheme
- Holding period yields for the short term envisaged
- Dividend pay outs
- Long Term parameters:
- Growth funds,
- Increases in NAVs substantially
- Other investors of the funds
- Fund managers, AMC
- Fluctuation levels in NAV
- Capital protection

Ans. to 5.6 C

A VC will fund typically in the following ways:

1. Seed Capital: This is the preliminary source of fund provided to the startup for either acquiring fixed assets of startup like computers, machineries etc. or for leasing out premises and such other operational setups. The seed capital is usually limited, and just enough for the startup to shore up its capital assets. In the recent times, there are 'incubators' who have specialized into this type of funding purely for seed capital, and seek to exit out once other investors find value.
2. Startup funding: This funding is given usually for the purposes of executing sales orders, in terms of product development and sales, doing sales promotional activities and the like.
3. Early stage funding: This is typically the Series A funding where the VC provides the funds for setting up the entire plant / site / services line which may also include the infusion of working capital.
4. Interim funding: Once the enterprise breaks even, the immediate focus will be on having stable cash flows. In the meantime, the management may also seek additional capital to ramp up its' operations model to its full capacity. This can be done in different ways –
    a. The management can seek a 'bridge loan' that is essentially a plank provided for stepping up to ramp up / reach the full capacity. Bridge loan, being a short term

financing loan, is an ideal way for enterprises to get a temporary source of funds before it can get replaced with a larger or a longer time frame based loan.

b. The management can seek a 'mezzanine' financing which is typically a hybrid of debt and preferred stock finance. In some cases, the mezzanine is purely a debt form of finance. In both cases, the repayment schedule gets tailored to the enterprise's cash flows thereby exhibiting flexibility to the management.

However, the fund comes at a price – the VC gets a direct stake in the equity of the enterprise post the conversion of preferred stock, which may make some managements uncomfortable for this sort of an arrangement. There are variants of mezzanine funding with some VCs who estimate that if the enterprise has high future potential, it can forego the requirement for a collateral value altogether or at leastkeep it to minimal levels; whereas some VCs would like to have an asset-backed security for the debt component. The equity component also gives the VC a say in the management affairs of the enterprise, which makes this route quite attractive to them. From the borrowers' point of view, this may be the costliest form of funding as th e rate of interest would be quite high, to recognize the risks getting carried in the form of uncollateralized debt. This can leave the management with a huge refinance cost; however, as stated earlier the VC would also take care of this in the tailoring of the repayment schedule.

5. Expansion funding: Once the enterprise is running full steam, and has managed to create its own space in the market in terms of brand recall value, the VC will surely be interested to provide additional funding in terms of long term finance for future growth prospects. This may also put the enterprise 'on the block' for potential buyers, especially large sized companies who regularly scout for smaller niche enterprises for adding further variety to their developed shelf of prod ucts and services.

Mode best suitable to Innovate Ltd.

Though Innovate Ltd. is exploring the option of Mezzazine financing, it is avoidable as innovate ltd. is not keen on passing any stake to VCs. Since it is in the expansion stage, it can consider expansion funding.

So, in order to avail short term funds, it can go for bridge loan. And, for long funds, it can approach expansion funding.

Ans. to 5.7

The reasons for raising funds through debt instead of shares could include:

- The stock price of the issuer is down and thus a bond issue is a better alternative.
- The firm does not wish to dilute its existing shareholders by issuing more equity.

Some of the pre-requisites could include:

- Credit rating of the debt instrument – will need a favourable credit rating
- From a regulatory and compliance perspective, listing of debt instruments could resemble an IPO process:
    - Applicability of SEBI (Issue and listing of Debt Securities) Regulations.
    - Periodical disclosure of information having bearing on performance/operation of the entity to be made to stock exchanges.
    - Half yearly financial results will need to be published
    - Additional disclosure of the following as part of the half yearly results:
        - Credit Rating
        - Asset cover available
        - Debt Equity Ratio
        - Details of payment of interest
        - Debt Service Coverage Ratio
        - Interest Service Coverage Ratio
        - Net Worth etc.
        - Annual report shall be in the form specified in the Companies Act, 2013.

The above key additional requirements would be applicable for the Company if it intends to list its debt securities. Further, it has to scale up its finance team and also put in place a proper governance mechanism if it intends to list its securities as the regulatory oversight and compliance requirements will be higher.

Alternative Solution 1 to 5.7

Two possibilities are there by going through the facts of the question. If Innovate Ltd. is already listed (the possibility of which is very less, being a startup), the company can issue convertible debt instruments. For this, it has to satisfy the requirements of SEBI (ICDR), 2018 including the additional requirements to be complied with in Regulation 107(1).

However, if it is an unlisted company (the possibility of which is greater), it can go for an initial public offer of convertible debt instruments as per regulation 2(1)(k) and 2(1)(eee) of the said regulations. Moreover, certain conditions are required to be complied with as per Regulation 5 and 6. Further, general conditions as laid down in Regulation 7 are also required to be fulfilled.

Innovate Ltd. seems to be very much geared upto meet the requirements as mentioned above as it has grown exponentially in recent past, it has huge cash balance in Indian Bank Account. Moreover, it already has 600 employees; it operates from 3 locations in India and has sales offices abroad.

Since, the company's major sources of revenues are from abroad, it has to additionally comply with Foreign Exchange Management Act, 1999 as well as its various rules and regulations.

Alternate Solution 2 to 5.7

Innovate Ltd. can issue debentures on a private placement basis, which under section 67 of the Companies Act requires that not exceeding fifty members are eligible to subscribe to the issue. Debentures may be secured or unsecured. Debentures must be redeemed (or compulsorily convertible) before 10 years. If not they will be treated as deposits and will come under the category of deposits and will have to comply with regulations of SEBI and RBI.(Rule 2, sub rule 1, clause c, of Companies Acceptance of Deposit Rules, 2014). These debentures on private placement basis cannot be listed by Innovate Ltd on the stock exchange, since in that case, SEBI (Issue of Debt Securities Regulations) will apply. Under these regulations, for being eligible to list debentures on the exchange, there should be a track record of profits in the preceding three years. Since Innovate Ltd broke even only last year, it does not satisfy the eligibility criterion to be governed by the said regulation. For this reason, it cannot also offer debentures to the public, whereupon it will have to take a compulsory listing and thus not eligible for public issue of debentures. Moreover, once it comes under the purview of the above regulation, it has to appoint debenture trustees and create a capital redemption reserve into which amounts have to be transferred each year from the distributable profits. Having broken even only last year, it may not be able to create the reserve next year.

It is not known whether Innovate is an already listed company, or whether it is an SME. If it comes under the purview of an SME, then the general regulations will not apply and SME regulations will apply. If it is an SME, it has special facilities under the RBI's special scheme to get loans from banks, SIDBI and other specified undertakings, both secured and unsecured within a minimum time frame.

Being a technology start up, it can get foreign direct investment under the open route without having to go through the government route. It can aim to do this since its customers are outside India. FDI should be from a limited number of investors.

Though Innovate Ltd is described as a start-up, it does not qualify for the benefits of funding under the Start-up India scheme, since the scheme is applicable only to private companies and Innovate Ltd is a public company.

Angel Funds registered under SEBI cannot fund Innovate Ltd since Angel Funds can fund only registered start-ups under the start-up India scheme.

Alternative Investment Funds governed by the SEBI regulations are eligible to invest in debt securities of unlisted companies, but this is only after they have invested two thirds in equity securities. Only then can one third be invested in debt securities. Innovate Ltd. is not interested in issuing equity. Hence this is also ruled out.

Venture capital funding arises when the start-up is almost ready to sell its products, but venture capitalists will look for equity shares to be issued. Innovate Ltd is against the issue of equity shares. Venture Capitalists who may take preference shares will be interested in converting it to equity if it is successful and are not likely to subscribe to non-convertible preference shares.

A registered start up can use External Commercial Borrowings under RBI's regulation. These have to be in the form of loans or convertible or non-convertible preference shares.

Not being eligible to be a registered start up, this is also not open for the company.

Debentures issued under private placement basis, that are compulsorily convertible after ten years into equity may be the most viable option, since debenture redemption reserve need not be created. In ten years' time, profits are likely to be adequate, considering the niche market Innovate Ltd. is in.

The company seems to be cash rich, trying to invest elsewhere. It should do so in a manner that guarantees enough liquidity to pay the interests on debentures or loans on time. Lock in period of the investments and gestation period for income generation should be very important parameters.