

PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT

QUESTIONS

Project Planning and Capital Budgeting

1. Wingmend Ltd. is an aeronautical maintenance company has planned to start its own flying training classes. Since company has already complete infrastructure for starting training classes it just needs to acquire a light commercial aircraft at a cost of ₹ 10,00,00,000. The expected cash flow after tax for the next three years is as follows:

(₹)

Year 1		Year 2		Year 3	
CFAT	Probability	CFAT	Probability	CFAT	Probability
2,80,00,000	0.1	3,00,00,000	0.1	3,60,00,000	0.2
3,60,00,000	0.2	4,00,00,000	0.3	5,00,00,000	0.5
5,00,00,000	0.4	6,40,00,000	0.4	7,00,00,000	0.2
8,00,00,000	0.3	9,00,00,000	0.2	9,60,00,000	0.1

Though the starting the flying classes is dream project for the management and is interested in taking same project yet the Company wishes to take into consideration all possible risk factors relating to airline training operations. Hence, the company wants to know:

- (a) The expected NPV of this venture with 6% risk free rate of interest as cost of capital.
(b) The possible deviation in the expected values.

Note: (i) Assume independent probability distribution for the expected cash flows after tax.

(ii) Calculations to be made in ₹ Crore upto 4 decimal points.

(iii) Use PVF upto 3 decimal points.

2. LX Ltd. is manufacturing cosmetic products. The company received a proposal from a cosmetic making machine supplier based in France for supplying an improved/ more efficient version of machine currently it is using. Hence, LX Ltd. is considering the replacement of its existing machine with a new machine. The Purchase price of the New machine is € 6 Million, and its expected Life is 8 years. The company follows straight-line method of depreciation on the original investment (scrap value is not to be considered for the purpose of depreciation).

The other expenses to be incurred for the New Machine are as under:

- (i) One-time fees paid to the consultant for his advice to buy New Machine ₹ 12,00,000.

- (ii) Additional Working Capital required ₹ 34,00,000. (will be released after 8 years)
- (iii) Installation Charges ₹ 18,00,000

The written down value of the existing machine is ₹ 1,52,00,000, and its Cash Salvage Value is ₹ 25,00,000. The dismantling of this machine would cost ₹ 9,00,000. The Annual Savings (before depreciation) from the New Machine would amount to ₹ 12,83,75,000. Income tax rate is 35%. The following additional information is also available:

Spot Exchange Rate	1€ = ₹ 90.00
Company's Required Rate of Return	13%
Tax Rate for STCG/ STCL	25%

You are required to advise on the viability of the proposal.

Also determine the sensitivity of Foreign Exchange Rate of € assuming fees paid to consultant as sunk cost.

Leasing Decisions

3. Armada Ltd. is contemplating to have an access to a machine for a period of 5 years. The company can have use of the machine for the stipulated period through leasing arrangement or the requisite amount can be borrowed to buy the machine. In case of leasing, the company received a proposal to pay annual rent at year end of ₹ 4.8 lakhs for a period of 5 years.

In case of purchase (which costs ₹ 20,00,000/-) the company would have a 12%, 5 years loan to be paid in equated installments, each installment becoming due to the beginning of each years. It is estimated that the machine can be sold for ₹ 4,00,000/- at the end of 5th year. The company uses straight line method of depreciation. Corporate tax rate is 30%. Post tax cost of capital of Armada Ltd. is 10%.

You are required to advice whether the machine should be bought or taken on lease. Also, analyse the financial viability from the point of view of the lessor assuming 12% post tax cost of capital.

Dividend Decisions

4. Z Ltd. has a capital of ₹ 20 crore in equity shares of ₹100 each. The shares are currently quoted at par. The company proposes to declare a dividend of ₹10 per share at the end of the current financial year. The beta for the risk class of which the company belongs is 2.00. The risk-free rate of interest is 4% and market return is 8%.
 - (i) Based on M-M Approach, calculate the market price of the share of the company, when the dividend is-
 - (a) declared and
 - (b) not declared.

- (ii) assuming that the company pays the dividend and has net profits of ₹ 10 crore and makes new investments of ₹ 20 crore during the period, how many new shares must be issued?
5. The following information pertains to Golden Ltd:
- | | |
|------------------------------|------------|
| Profit before tax | ₹ 75 crore |
| Tax rate | 30% |
| Equity capitalization rate | 15% |
| Return on investment (ROI) | 18% |
| Retention ratio | 80% |
| Number of shares outstanding | 75,00,000 |
- The market price of the share of the company in the bull market was somewhere around ₹ 2100 per share. Advice, whether the share of the Golden Ltd. should be purchased or not. Further, also suggest the form of Market prevalent as per EMH Theory.
- Note: Use Gordon's Growth Model.

Indian Capital Market

6. The following data relate to R Ltd.'s share price:
- | | |
|-------------------------------|---------|
| Current price per share | ₹ 1,900 |
| 6 months future's price/share | ₹ 2050 |
- Assuming it is possible to borrow money in the market for transactions in securities at 10% per annum,
- (i) advise the justified theoretical price of a 6-months forward purchase; and
- (ii) evaluate any arbitrage opportunity, if available.
7. The Following data relate to A Ltd.'s Portfolio:

Shares	X Ltd.	Y Ltd.	Z Ltd.
No. of Shares (lakh)	6	8	4
Price per share (₹)	1000	1500	500
Beta	1.50	1.30	1.70

The CEO is of opinion that the portfolio is carrying a very high risk as compared to the market risk and hence interested to reduce the portfolio's systematic risk to 0.95. Treasury Manager has suggested two below mentioned alternative strategies:

- (i) Dispose off a part of his existing portfolio to acquire risk free securities, or

- (ii) Take appropriate position on Nifty Futures, currently trading at 8250 and each Nifty points multiplier is ₹ 210.

You are required to:

- (a) Interpret the opinion of CEO, whether it is correct or not.
- (b) Calculate the existing systematic risk of the portfolio,
- (c) Advise the value of risk-free securities to be acquired,
- (d) Advise the number of shares of each company to be disposed off,
- (e) Advise the position to be taken in Nifty Futures and determine the number of Nifty contracts to be bought/sold; and
- (f) Calculate the new systematic risk of portfolio if the company has taken position in Nifty Futures and there is 2% rise in Nifty.

Note: Make calculations in ₹ lakh and upto 2 decimal points.

8. Espaces plc is consumer electronics wholesaler. The business of the firm is highly seasonal in nature. In 6 months of a year, firm has a huge cash deposits and especially near Christmas time and other 6 months firm cash crunch, leading to borrowing of money to cover up its exposures for running the business.

It is expected that firm shall borrow a sum of £25 million for the entire period of slack season in about 3 months.

The banker of the firm has given the following quotations for Forward Rate Agreement (FRA):

Spot	5.50% - 5.75%
3 × 6 FRA	5.59% - 5.82%
3 × 9 FRA	5.64% - 5.94%

3-month £50,000 future contract maturing in a period of 3 months is quoted at 94.15.

You are required to:

- (a) Advise the position to be taken in Future Market by the firm to hedge its interest rate risk and demonstrate how 3 months Future contract shall be useful for the firm, if later interest rate turns out to be (i) 4.5% and (ii) 6.5%
- (b) Evaluate whether the interest cost to Espace plc shall be less had it adopted the route of FRA instead of Future Contract.

Note: Ignore the time value of money in settlement amount for future contract.

Security Analysis and Valuation

9. ABC Limited, just declared a dividend of ₹ 28.00 per share. Mr. A is planning to purchase the share of ABC Limited, anticipating increase in growth rate from 8% to 9%, which will continue for three years. He also expects the market price of this share to be ₹ 720.00 after three years.

You are required to determine:

- (i) the maximum amount Mr. A should pay for shares, if he requires a rate of return of 13% per annum.
- (ii) the maximum price Mr. A will be willing to pay for share, if he is of the opinion that the 9% growth can be maintained indefinitely and require 13% rate of return per annum.
- (iii) the price of share at the end of three years, if 9% growth rate is achieved and assuming other conditions remaining same as in (ii) above.

Note: Calculate rupee amount up to two decimal points and use PVF upto 3 decimal points.

10. KLM Limited has issued 90,000 equity shares of ₹ 10 each. KLM Limited's shares are currently selling at ₹ 72. The company has a plan to make a rights issue of one new equity share at a price of ₹ 48 for every four shares held.

You are required to:

- (a) Calculate the theoretical post-rights price per share and analyse the change
- (b) Calculate the theoretical value of the right alone.
- (c) Suppose Mr. A who is holding 100 shares in KLM Ltd. is not interested in subscribing to the right issue, then advice what should he do.

Portfolio Theory

11. Equity of ABC Ltd. (ABCL) is ₹ 500 Crores, its debt, is worth ₹ 290 Crores. Printer Division segments value is attributable to 64%, which has an Asset Beta (β_p) of 1.55, balance value is applied on Spares and Consumables Division, which has an Asset Beta (β_{sc}) of 1.40 ABCL Debt beta (β_D) is 0.28.

You are required to calculate:

- (i) Equity Beta (β_E),
- (ii) Ascertain Equity Beta (β_E), if ABC Ltd. decides to change its Debt Equity position by raising further debt and buying back of equity to have its Debt to Equity Ratio at 1.50. Assume that the present Debt Beta (β_{D1}) is 0.45 and any further funds raised by way of Debt will have a Beta (β_{D2}) of 0.50.
- (iii) Whether the new Equity Beta (β_E) justifies increase in the value of equity on account of leverage?

12. K Ltd. has invested in a portfolio of short-term equity investments. You are required to calculate the risk of K Ltd.'s short-term investment portfolio relative to that of the market from the information given below:

Investment	A	B	C	D
No. of shares	1,20,000	1,60,000	2,00,000	2,50,000
Market price per share (₹)	8.58	5.84	4.34	6.28
Beta	2.32	4.56	1.80	3.00
Expected Dividend Yield	9.50%	14.00%	7.50%	16.00%

The current market return is 20% and the risk free return is 10%.

Advise whether K Ltd. should change the composition of its portfolio. If yes, then how.

Note: Make calculations upto 4 decimal points.

Financial Services

13. ABC Ltd., who is dealing in computer software ABC Ltd. is considering a proposal to appoint a Factor. The following information is available:

Particulars	Recourse	Non - Recourse
Average reduction in collection of receivables (Days)	30	30
Reduction in Bad Debts by	0.30%	0.30%
Saving in Administration cost ₹	40,000	40,000
Advance	80%	80%
Interest on advance	2 % p.a. higher than current OD interest of 7 % p.a.	
Factor fee	0.60%	1.25%

ABC Ltd. is having credit sales of ₹ 2, 10, 00,000 with average receivables of ₹ 35, 00,000. Bad debts are 0.9% on sales. You are required to evaluate which proposal is best.

(Assume 1 year = 360 Days)

Mutual Fund

14. The following particulars relating to S Fund Schemes:

Particulars	Value (in ₹ Crores)
1. Investment in Shares (at cost)	
a. Pharmaceuticals companies	158
b. Construction Industries	62
c. Service Sector Companies	112

d. IT Companies	68
e. Real Estate Companies	20
2. Investment in Bonds (Fixed Income)	
a. Listed Bonds (8000, 14% Bonds of ₹ 15,000 each)	24
b. Unlisted Bonds	14
3. No. of Units outstanding (crores)	8.4
4. Expenses Payable	7
5. Cash and Cash equivalents	3
6. Market expectations on listed bonds	8.842%

The fund has incurred the following expenses:

Consultancy and Management fees ₹ 520 Lakhs

Office Expenses ₹ 180 Lakhs

Advertisement Expenses ₹ 48 Lakhs

Particulars relating to each sector are as follows:

Sector	Index on Purchase date	Index on Valuation date
Pharmaceutical companies	300	500
Construction Industries	275	490
Service Sector Companies	285	500
IT Companies	270	515
Real Estate Companies	265	440

Required:

- Calculate the Net Asset Value of the fund
- Calculate the Net Asset Value per unit
- Determine the Net return (Annualized), if the period of consideration is 4 years, and the fund has distributed ₹ 2 per unit per year as cash dividend during the same period.

Note: Calculate figure in ₹ Crore upto 3 decimal points.

International Financial Management

- Right Limited has proposed to expand its operations for which it requires funds of \$ 30 million, net of issue expenses which amount to 4% of the issue size. It proposed to raise the funds through a GDR issue. It considers the following factors in pricing the issue:

- The expected domestic market price of the share is ₹ 300 (Face Value of ₹ 10 each share)

- (ii) 4 shares underlying each GDR
- (iii) Underlying shares are priced at 20% discount to the market price
- (iv) Expected exchange rate is ₹ 70/\$

You are required to compute the number of GDR's to be issued and cost of GDR to Right Limited, if 20% dividend is expected to be paid with a growth rate of 20%.

Foreign Exchange Exposure and Risk Management

16. Doom Ltd. is an export business house. The company prepares invoice in customers' currency. Its debtors of US\$ 48, 00,000 is due on April 1, 2020.

Market information as at January 1, 2020 is:

Exchange rates US\$/INR		Currency Futures US\$/INR	
Spot	0.014285	Contract size: ₹ 2,88,16,368	
1-month forward	0.014184	1-month	0.014178
3-months forward	0.013889	3-month	0.013881

	Initial Margin	Interest rates in India
1-Month	₹ 27,500	5.5%
3-Months	₹ 32,500	9%

On April 1, 2020 the spot rate US\$/INR is 0.013894 and currency future rate is 0.013893.

Recommend as to which of the following methods would be most advantageous to Doom Ltd.

- (i) Using forward contract
- (ii) Using currency futures
- (iii) Not hedging the currency risk

Note: Round off calculation upto zero decimal points.

17. Telereal Trillium, a UK Company is in the process of negotiating an order amounting €5.5 million with a large German retailer on 6 month's credit. If successful, this will be first time for Telereal Trillium has exported goods into the highly competitive German Market. The Telereal Trillium is considering following 3 alternatives for managing the transaction risk before the order is finalized.
- (i) Mr. Grand, the Marketing head has suggested that in order to remove transaction risk completely Telereal Trillium should invoice the German firm in Sterling using the current €/£ average spot rate to calculate the invoice amount.

- (ii) Mr. John, CE is doubtful about Mr. Grand's proposal and suggested an alternative of invoicing the German firm in € and using a forward exchange contract to hedge the transaction risk.
- (iii) Ms. Royce, CFO is agreed with the proposal of Mr. John to invoice the German firm in €, but she is of opinion that Telereal Trillium should use sufficient 6 month sterling future contracts (to the nearest whole number) to hedge the transaction risk.

Following data is available

Spot Rate	€ 1.1980 - €1.1990/£
6 months forward points	0.60 – 0.55 Euro Cents.
6 month future contract is currently trading at	€ 1.1943/£
6 month future contract size is	£70,500
After 6 month Spot rate and future rate	€ 1.1873/£

You are required to

- (a) Advise the alternative you consider to be most appropriate.
- (b) Interpret the proposal of Mr. Grand from non-financial point of view.

Note: Calculate (to the nearest £) the £ receipt.

Merger, Acquisition and Restructuring

18. ABC Ltd. is intending to acquire XYZ Ltd. by way of merger and the following information is available in respect of these companies:

	ABC Ltd.	XYZ Ltd.
Total Earnings (E) (in lakh)	₹ 1200	₹400
Number of outstanding shares (S) (in lakh)	400	200
Price earnings ratio (P/E)	8	7

- (a) Determine the maximum exchange ratio acceptable to the shareholders of ABC Ltd., if the P/E ratio of the combined firm is expected to be 8?
- (b) Determine the minimum exchange ratio acceptable to the shareholders XYZ Ltd., if the P/E ratio of the combined firm is expected to be 10?

Note: Make calculation in lakh multiples and compute ratio upto 4 decimal points.

19. Sun Ltd. recently made a profit of ₹ 200 crore and paid out ₹ 80 crore (slightly higher than the average paid in the industry to which it pertains). The average PE ratio of this industry is 9. The estimated beta of Sun Ltd. is 1.2. As per Balance Sheet of Sun Ltd., the shareholder's fund is ₹ 450 crore and number of shares is 10 crore. In case the company

is liquidated, building would fetch ₹ 200 crore more than book value and stock would realize ₹ 50 crore less.

The other data for the industry is as follows:

Projected Dividend Growth	4%
Risk Free Rate of Return	6%
Market Rate of Return	11%

Calculate the valuation of Sun Ltd. using

- P/E Ratio
- Dividend Growth Model
- Book Value
- Net Realizable Value

Theoretical Questions

20. Write short notes on:

- Traits required to make an organization financially sustainable.
- Distinguish between Financial Lease and Operating Lease
- CAMEL Model in Credit Rating
- Debt/ Asset Securitisation
- Salient features of Foreign Currency Convertible Bonds

SUGGESTED ANSWERS

1. (a) Expected NPV

(in ₹ Crore)

Year I			Year II			Year III		
CFAT	P	CF×P	CFAT	P	CF×P	CFAT	P	CF×P
2.80	0.1	0.28	3.00	0.1	0.30	3.60	0.2	0.72
3.60	0.2	0.72	4.00	0.3	1.20	5.00	0.5	2.50
5.00	0.4	2.00	6.40	0.4	2.56	7.00	0.2	1.40
8.00	0.3	<u>2.40</u>	9.00	0.2	<u>1.80</u>	9.60	0.1	<u>0.96</u>
	$\bar{x}$ or $\overline{CF}$	<u>5.40</u>		$\bar{x}$ or $\overline{CF}$	<u>5.86</u>			$\bar{x}$ or $\overline{CF}$ <u>5.58</u>

NPV	PV factor @ 6%	Total PV
5.40	0.943	5.0922
5.86	0.890	5.2154
5.58	0.840	<u>4.6872</u>
	PV of cash inflow	14.9948
	Less: Cash outflow	<u>10.0000</u>
	NPV	<u>4.9948</u>

(b) Possible deviation in the expected value

Year I				
$X - \bar{X}$	$X - \bar{X}$	$(X - \bar{X})^2$	P_1	$(X - \bar{X})^2 P_1$
2.80 – 5.40	-2.60	6.76	0.1	0.676
3.60 – 5.40	-1.80	3.24	0.2	0.648
5.00 – 5.40	-0.40	0.16	0.4	0.064
8.00 – 5.40	2.60	6.76	0.3	<u>2.028</u>
				<u>3.416</u>

$$\sigma_2 = \sqrt{3.416} = 1.8482$$

Year II				
$X - \bar{X}$	$X - \bar{X}$	$(X - \bar{X})^2$	P_2	$(X - \bar{X})^2 \times P_2$
3.00 – 5.86	-2.86	8.1796	0.1	0.8180
4.00 – 5.86	-1.86	3.4596	0.3	1.0379
6.40 – 5.86	0.54	0.2916	0.4	0.1166
9.00 – 5.86	3.14	9.8596	0.2	<u>1.9719</u>
				<u>3.9444</u>

$$\sigma_2 = \sqrt{3.9444} = 1.9861$$

Year III				
$X - \bar{X}$	$X - \bar{X}$	$(X - \bar{X})^2$	P_3	$(X - \bar{X})^2 \times P_3$
3.60 – 5.58	-1.98	3.9204	0.2	0.7841

5.00 – 5.58	-0.58	0.3364	0.5	0.1682
7.00 – 5.58	1.42	2.0164	0.2	0.4033
9.60 – 5.58	4.02	16.1604	0.1	<u>1.6160</u>
				<u>2.9716</u>

$$\sigma_3 = \sqrt{2.9716} = 1.7238$$

Standard deviation about the expected value:

$$\sigma\sigma = \sqrt{\frac{3.4160}{(1.06)^2} + \frac{3.9444}{(1.06)^4} + \frac{2.9716}{(1.06)^6}} = 2.8739$$

2. (a) Working Notes:

1. Computation of Annual Depreciation-

Particulars	₹
Purchase Price (€ 6 Million x ₹ 90.00)	54,00,00,000
Add: 1. Installation Charges	18,00,000
2. Fees Paid to Consultant for Advice	12,00,000
Total Cost of New Machine	54,30,00,000
Useful Life	8 Years
Annual Depreciation (Total Cost/No. of Years)	6,78,75,000

2. Computation of Annual Cash Savings-

Particulars	₹
Annual Saving	12,83,75,000
Less - Depreciation	6,78,75,000
Annual Saving after Depreciation	6,05,00,000
Less - Tax @ 35%	2,11,75,000
Earning after Tax	3,93,25,000
Add- Depreciation on New Machine	6,78,75,000
Annual Cash Savings	10,72,00,000

3. Tax effect on sale of Old Machine-

Particulars	₹
Proceeds of Sale	25,00,000
Less: Cost of Removal	9,00,000

Net Proceeds	16,00,000
Less: WDV	1,52,00,000
Net Loss due to Sale	1,36,00,000
Tax savings due to Loss on Sale @ 25%	34,00,000
Total Cash Inflow due to Sale (₹ 16,00,000 + 34,00,000)	50,00,000

(b) Computation of Net Present Value

Particulars	Period	Cash Flow (₹)	PVF @13%	PV (₹)
(a) Annual Cash inflow after Tax	1-8	10,72,00,000	4.800	51,45,60,000
(b) Net Salvage Value of Existing Machine	0	50,00,000	1.000	50,00,000
(c) Working Capital Realized	8	34,00,000	0.376	12,78,400
Present Value of Cash Inflows				52,08,38,400
Less: 1. Initial Investment	0	54,30,00,000	1.000	54,30,00,000
2. Initial Working Capital	0	34,00,000	1.000	34,00,000
NPV of the Proposal				(2,55,61,600)

Decision: Since NPV of the project is negative it is not viable.

(b) Sensitivity of Foreign Exchange Rate

Let X be the exchange rate at which the NPV (at given Cost of Capital) shall be zero, therefore

Cost of Machine + Initial Working Capital + Installation Cost = Present Value of Cash Inflows

$$€ 6 \text{ Million} \times X + ₹ 18,00,000 + ₹ 34,00,000 = ₹ 52,08,38,400$$

$$X = ₹ 85.94 \text{ i.e. } ₹ 85.94 \text{ per } €$$

Sensitivity € Exchange Rate

$$\therefore \frac{90.00 - 85.94}{90.00} \times 100 = 4.51\%$$

3. Calculation of loan installment:

$$₹ 20,00,000 / (1 + PVIFA 12\%, 4)$$

$$₹ 20,00,000 / (1 + 3.038) = ₹ 4,95,295$$

Debt Alternative: Calculation of Present Value of Outflows

(Amount in ₹)

(1) End of year	(2) Debt Payment	(3) Interest	(4) Dep.	(5) Tax Shield [(3)+(4)]x0.3	(6) Cash outflows (2) – (5)	(7) PV factors @ 10%	(8) PV
0	4,95,295	0	0	0	4,95,295	1.000	4,95,295
1	4,95,295	1,80,565	3,20,000	1,50,170	3,45,125	0.909	3,13,719
2	4,95,295	1,42,797	3,20,000	1,38,839	3,56,456	0.826	2,94,433
3	4,95,295	1,00,498	3,20,000	1,26,149	3,69,146	0.751	2,77,229
4	4,95,295	52,616	3,20,000	1,11,785	3,83,510	0.683	2,61,937
5	0	0	3,20,000	96,000	(96,000)	0.621	(59,616)
							15,82,997
Less: Salvage Value ₹ 4,00,000 x 0.621							2,48,400
Total Present Value of Outflow							13,34,597

*balancing figure

Leasing Decision: Calculation of Present Value of Outflows

$$\text{Yrs. 1-5} \quad ₹ 4,80,000 \times (1 - 0.30) \times 3.790 = ₹ 12,73,440$$

Decision: Leasing option is viable.

From Lessor's Point of View

		(₹)
Cost of Machine		(-) 20,00,000
PV of Post tax lease Rental (₹4,80,000 x 0.7 x 3.605)	12,11,280	
PV of Depreciation tax shield (₹3,20,000 x 0.3 x 3.605)	3,46,080	
PV of salvage value (₹4,00,000 x 0.567)	<u>2,26,800</u>	<u>17,84,160</u>
NPV		(-) <u>2,15,840</u>

Decision – Leasing proposal is not viable.

4. As per MM model, the current market price of equity share is:

$$P_0 = \frac{1}{1 + k_e} \times (D_1 + P_1)$$

Where K_e (Cost of Equity) by applying CAPM shall be

$$4\% + 2.00(8\% - 4\%) = 12\%$$

(i) (a) If the dividend is not declared:

$$100 = \frac{1}{1 + 0.12} (0 + P_1)$$

$$100 = \frac{P_1}{1.12}$$

$$P_1 = ₹112$$

The Market price of the equity share at the end of the year would be ₹112.

(b) If the dividend is declared:

$$100 = \frac{1}{1 + 0.12} \times (10 + P_1)$$

$$100 = \frac{10 + P_1}{1.12}$$

$$112 = 10 + P_1$$

$$P_1 = 112 - 10 = ₹ 102$$

The market price of the equity share at the end of the year would be ₹ 102.

(ii) In case the firm pays dividend of ₹10 per share out of total profits of ₹ 10 crore and plans to make new investment of ₹ 20 crore, the number of shares to be issued may be found as follows:

Total Earnings	₹ 10,00,00,000
- Dividends paid	<u>2,00,00,000</u>
Retained earnings	8,00,00,000
Total funds required	<u>20,00,00,000</u>
Fresh funds to be raised	<u>12,00,00,000</u>
Market price of the share	102
Number of shares to be issued (₹ 12,00,00,000 / 102)	11,76,470.588
or, the firm would issue 11,76,471 shares at the rate of ₹ 102	

5. Gordon's Formula

$$P_0 = \frac{E(1-b)}{K-br}$$

$$P_0 = \text{Market price per share}$$

$$E = \text{Earnings per share } (\text{₹ } 52.50 \text{ crore} / 75,00,000) = \text{₹ } 70$$

$$K = \text{Cost of Capital} = 15\%$$

$$b = 80\%$$

$$D = \text{₹ } 70 \times 0.20 = \text{₹ } 14$$

$$r = \text{IRR} = 18\%$$

$$br = \text{Growth Rate } (0.80 \times 18\%) = 14.4\%$$

$$P_0 = \frac{70(1-0.80)}{0.15-0.144} = \frac{14}{0.006}$$

$$= \text{₹ } 2333.33$$

Advice: Despite the fact that market price of share of the company during bull was around ₹2200, it is worth to purchase the same as intrinsic value of share is higher than market price even in bull phase.

The form of market is weak form of market as it is not discounting all information..

6. (i) The justified theoretical price of a 6 months forward contract as per cost to carry model is as follows:

$$\text{Theoretical minimum price} = \text{₹ } 1,900 + (\text{₹ } 1,900 \times 10/100 \times 6/12) = \text{₹ } 1,995$$

- (ii) Arbitrage Opportunity- Since current future price is ₹2050, yes there is an opportunity for carrying arbitrage profit. The arbitrageur can borrow money @ 10 % for 6 months and buy the shares at ₹ 1,900. At the same time he can sell the shares in the futures market at ₹ 2,050. On the expiry date 6 months later, he could deliver the share and collect ₹ 2,050 pay off ₹ 1,995 and record a risk – less profit of ₹ 55 (₹ 2,050 – ₹ 1,995).
7. (a) Yes, the apprehension of CEO is correct as the current portfolio is more riskier than market as the beta (Systematic Risk) of market portfolio is as computed as follows:

Shares	No. of shares (lakhs) (1)	Market Price of Per Share (2) (₹)	(1) × (2) (₹ lakhs)	% to total (w)	β (x)	Wx
X Ltd.	6.00	1000.00	6000.00	0.30	1.50	0.45
Y Ltd.	8.00	1500.00	12000.00	0.60	1.30	0.78

Z Ltd.	4.00	500.00	<u>2000.00</u>	<u>0.10</u>	1.70	<u>0.17</u>
			<u>20000.00</u>	1.00		<u>1.40</u>

- (b) Since the Beta of existing portfolio is 1.40, the systematic risk of the current portfolio is 1.40.

- (c) Required Beta 0.95

Let the proportion of risk-free securities for target beta $0.95 = p$

$$0.95 = 0 \times p + 1.40 (1 - p)$$

$$p = 0.32 \text{ i.e. } 32\%$$

Shares to be disposed off to reduce beta ($20000 \times 32\%$) ₹ 6,400 lakh and Risk Free securities to be acquired for the same amount.

- (d) Number of shares of each company to be disposed off

Shares	% to total (w)	Proportionate Amount (₹ lakhs)	Market Price Per Share (₹)	No. of Shares (Lakh)
X Ltd.	0.30	1920.00	1000.00	1.92
Y Ltd.	0.60	3840.00	1500.00	2.56
Z Ltd.	0.10	640.00	500.00	1.28

- (e) Since, the company is in long position in cash market it shall take short position in Future Market.

Number of Nifty Contract to be sold

$$\frac{(1.40 - 0.95) \times 20000 \text{ lakh}}{8,250 \times 210} = 519 \text{ contracts}$$

- (f) If there is 2% rises in Nifty there will be 2.80% ($2\% \times 1.40$) rise for portfolio of shares

	₹ Lakh
Current Value of Portfolio of Shares	20000
Value of Portfolio after rise	20560
Mark-to-Market Margin paid ($8250 \times 0.020 \times ₹ 210 \times 519$)	179.83
Value of the portfolio after rise of Nifty	20380.17
% change in value of portfolio $(20380.17 - 20000) / 20000$	1.90%
% rise in the value of Nifty	2%
New Systematic Risk (Beta)	0.95

8. (a) (i) Since firm is a borrower it will like to off-set interest cost by profit on Future Contract. Accordingly, if interest rate rises it will gain hence it should sell interest rate futures.

$$\begin{aligned}\text{No. of Contracts} &= \frac{\text{Amount of Borrowing}}{\text{Contract Size}} \times \frac{\text{Duration of Loan}}{3 \text{ months}} \\ &= \frac{\text{£ } 25,000,000}{\text{£ } 50,000} \times \frac{6}{3} = 1000 \text{ Contracts}\end{aligned}$$

- (ii) The final outcome in the given two scenarios shall be as follows:

	If the interest rate turns out to be 4.5%	If the interest rate turns out to be 6.5%
<i>Future Course Action :</i>		
Sell to open	94.15	94.15
Buy to close	95.50 (100 - 4.5)	93.50 (100 - 6.5)
Loss/ (Gain)	1.35%	(0.65%)
Cash Payment (Receipt) for Future Settlement	£50,000 × 1000 × 1.35% × 3/12 = £1,68,750	£50,000 × 1000 × 0.65% × 3/12 = (£81,250)
Interest for 6 months on £50 million at actual rates	£25 million × 4.5% × ½ = £5,62,500	£25 million × 6.5% × ½ = £ 8,12,500
	£ 7,31,250	£ 7,31,250

Thus, the firm locked itself in interest rate $\frac{\text{£ } 7,31,250}{\text{£ } 25,000,000} \times 100 \times \frac{12}{6} = 5.85\%$

- (b) No, the interest cost shall not be less for Espace plc had it taken the route of FRA, as the 3 x 9 FRA contract are available at 5.64% – 5.94% i.e. borrowing rate of 5.94%. Hence, the interest cost under this option shall be nearby by 5.94% which is more than interest rate under Future contract rate of 5.85%.
9. (i) **Expected dividend for next 3 years.**
- Year 1 (D₁) ₹ 28.00 (1.09) = ₹ 30.52
- Year 2 (D₂) ₹ 28.00 (1.09)² = ₹ 33.27

Year 3 (D_3) ₹ 28.00 $(1.09)^3 = ₹ 36.26$

Required rate of return = 13% (K_e)

Market price of share after 3 years = (P_3) = ₹ 720

The present value of share

$$P_0 = \frac{D_1}{(1+ke)} + \frac{D_2}{(1+ke)^2} + \frac{D_3}{(1+ke)^3} + \frac{P_3}{(1+ke)^3}$$

$$P_0 = \frac{30.52}{(1+0.13)} + \frac{33.27}{(1+0.13)^2} + \frac{36.26}{(1+0.13)^3} + \frac{720}{(1+0.13)^3}$$

$$P_0 = 30.52(0.885) + 33.27(0.783) + 36.26(0.693) + 720(0.693)$$

$$P_0 = 27.01 + 26.05 + 25.13 + 498.96$$

$$P_0 = ₹ 577.15$$

- (ii) If growth rate 9% is achieved for indefinite period, then maximum price of share should Mr. A willing be to pay is

$$P_0 = \frac{D_1}{(ke - g)} = \frac{₹ 30.52}{0.13 - 0.09} = \frac{₹ 30.52}{0.04} = ₹ 763$$

- (iii) Assuming that conditions mentioned above remain same, the price expected after 3 years will be:

$$P_3 = \frac{D_4}{k_e - g} = \frac{D_3(1.09)}{0.13 - 0.09} = \frac{36.26 \times 1.09}{0.04} = \frac{39.52}{0.04} = ₹ 988$$

10. (a) Calculation of theoretical Post-rights (ex-right) price per share

$$\text{Ex-right value} = \left[\frac{MN + SR}{N + R} \right]$$

Where,

M = Market price,

N = Number of old shares for a right share

S = Subscription price

R = Right share offer

$$= \left[\frac{₹ 72 \times 4 + ₹ 48 \times 1}{4 + 1} \right] = ₹ 67.20$$

Thus, post right issue the price of share has reduced by ₹4.80 per share.

(b) Calculation of theoretical value of the rights alone:

= Ex-right price – Cost of rights share

= ₹ 67.20 – ₹ 48 = ₹ 19.20

Or

$$= \frac{₹ 67.20 - ₹ 48}{4} = ₹ 4.80$$

- (c) If Mr. A is not interested in subscribing to the right issue, he can renounce his right eligibility @ ₹ 19.20 per right and can earn a gain of ₹ 480.

11. (i) Equity Beta

To calculate Equity Beta first we shall calculate Weighted Average of Asset Beta as follows:

$$= 1.55 \times 0.64 + 1.40 \times 0.36$$

$$= 0.992 + 0.504 = 1.496$$

Now we shall compute Equity Beta using the following formula:

$$\beta_{\text{Asset}} = \beta_{\text{Equity}} \left[\frac{E}{E + D(1 - t)} \right] + \beta_{\text{Debt}} \left[\frac{D(1 - t)}{E + D(1 - t)} \right]$$

Accordingly,

$$1.496 = \beta_{\text{Equity}} \left[\frac{500}{500 + 290} \right] + \beta_{\text{Debt}} \left[\frac{290}{500 + 290} \right]$$

$$1.496 = \beta_{\text{Equity}} \left[\frac{500}{790} \right] + 0.28 \left[\frac{290}{790} \right]$$

$$\beta_{\text{Equity}} = 2.20$$

(ii) Equity Beta on change in Capital Structure

Amount of Debt to be raised:

Particulars	Value (in ₹ Crore)
Total Value of Firm (Equity ₹ 500 crore + Debt ₹ 290 crore)	790
Desired Debt Equity Ratio	1.50 : 1.00
Desired Debt Level = $\frac{\text{Total Value} \times \text{Debt Ratio}}{\text{Debt Ratio} + \text{Equity Ratio}}$	474
Less: Value of Existing Debt	(290)
Value of Debt to be Raised	184

$$\begin{aligned}
 \text{Equity after Repurchase} &= \text{Total value of Firm} - \text{Desired Debt Value} \\
 &= ₹ 790 \text{ Crore} - ₹ 474 \text{ Crore} \\
 &= ₹ 316 \text{ Crore}
 \end{aligned}$$

Weighted Average Beta of ABCL:

Source of Finance	Investment (in ₹ Crore)	Weight	Beta of the Division	Weighted Beta
Equity	316	0.4	$\beta_{(E=X)}$	0.4x
Debt – 1	290	0.367	0.45	0.165
Debt – 2	184	0.233	0.50	0.117
	790	Weighted Average Beta		0.282 + (0.4x)

$$\beta_{ABCL} = 0.282 + 0.4x$$

$$1.496 = 0.282 + 0.4x$$

$$0.4x = 1.496 - 0.282$$

$$X = 1.214/0.4 = 3.035$$

$$\beta_{\text{New Equity}} = 3.035$$

- (iii) Yes, it justifies the increase as it leads to increase in the Value of Equity due to increase in Beta.
12. (i) To determine whether K Ltd. should change composition of its portfolio first we should determine the Beta of the Portfolio and compare it with implicit Beta as justified by the Return on Portfolio.

Calculation of Beta of Portfolio

Investment	No. of shares	Market Price (₹)	Market Value	Dividend Yield	Dividend	Composition	β	Weighted β
A	1,20,000	8.58	10,29,600	9.50%	97,812	0.2339	2.32	0.5426
B	1,60,000	5.84	9,34,400	14.00%	1,30,816	0.2123	4.56	0.9681
C	2,00,000	4.34	8,68,000	7.50%	65,100	0.1972	1.80	0.3550
D	2,50,000	6.28	15,70,000	16.00%	2,51,200	0.3566	3.00	1.0698
			44,02,000		5,44,928	1.0000		2.9355

$$\text{Return of the Portfolio} = \frac{5,44,928}{44,02,000} = 0.1238$$

Beta of Port Folio 2.9355

Market Risk implicit

$$0.1238 = 0.10 + \beta \times (0.20 - 0.10)$$

$$\text{Or, } 0.10 \beta + 0.10 = 0.1238$$

$$\beta = \frac{0.1238 - 0.10}{0.10} = 0.238$$

Market β implicit is 0.238 while the portfolio β is 2.93. Thus the portfolio is marginally risky compared to the market.

- (ii) To decide whether K Ltd. should change the composition of its portfolio the dividend yield (given) should be compared with the Expected Return as per CAPM as follows:

Expected return as per CAPM is $R_f + (R_M - R_f) \beta$

Accordingly,

$$\begin{aligned} \text{Expected Return for investment A} &= 0.10 + (0.20 - 0.10) 2.32 \\ &= 33.20\% \end{aligned}$$

$$\begin{aligned} \text{Expected Return for investment B} &= 0.10 + (0.20 - 0.10) 4.56 \\ &= 55.60\% \end{aligned}$$

$$\begin{aligned} \text{Expected Return for investment C} &= 0.10 + (0.20 - 0.10) 1.80 \\ &= 28\% \end{aligned}$$

$$\begin{aligned} \text{For investment D, Rs} &= 0.10 + (0.20 - 0.10) 3 \\ &= 40\% \end{aligned}$$

Comparing dividend yields with the expected returns of investment as per CAPM it can be observed that all investments are over-priced and they should be sold by the K Ltd. and acquire new securities.

13. (a) Working Notes- (₹ in Lakhs)

Reduction in Trade Receivable under Factoring Agreement

Current Trade Receivable 35.00

Revised Receivable $(210 \times 30/360)$ 17.50

17.50

(i) Calculation of Benefit with Recourse Factoring

Finance cost saving = 17.50×0.07 1.2250

Bad Debt Saving	0.6300
Administration Cost Saving	<u>0.4000</u>
Total Saving	2.2550
Less: Factoring Fee	1.2600
Additional Interest in Advance (17.50 x 0.80 x 2%)	<u>0.2800</u>
	<u>0.7150</u>

(ii) Calculation of Benefit with Non-Recourse Factoring

Finance cost saving = 17.50 x 0.07	1.2250
Bad Debt Saving	1.8900
Administration Cost Saving	<u>0.4000</u>
Total Saving	3.5150
Less: Factoring Fee	2.6250
Additional Interest in Advance (17.50 x 0.80 x 2%)	<u>0.2800</u>
	<u>0.6100</u>

Decision: Since the benefits are more in case of Recourse Factoring proposal same should be accepted.

14. (i) Calculation of NAV of the Fund

		(in ₹ Crore)
1. Value of Shares		
a. Pharmaceutical Companies	$158 \times \frac{500}{300}$	263.333
b. Construction Companies	$62 \times \frac{490}{275}$	110.473
c. Service Sector Companies	$112 \times \frac{500}{285}$	196.491
d. IT Companies	$68 \times \frac{515}{270}$	129.704

	e. Real Estate Companies	$20 \times \frac{440}{265}$	33.208
2.	Investment in Bonds		
	a. Listed Bonds	$\frac{14}{8.842} \times 24$	38.00
	b. Unlisted Bonds		14.000
3.	Cash and Cash Equivalents		3.00
			788.209
	Less: Expense Payable		7.000
	NAV of the Fund		781.209

(ii) NAV of the Fund per Unit

NAV of the Fund ₹ 781.209 crore

Number of Units 8.40 crore

NAV Per Unit (₹ 781.209 crore/ 8.40 crore) ₹ 93.00

(iii) Net Return

Initial Cost Per Unit		
Investment in Shares	₹ 420 crore	
Bonds	₹ 38 crore	₹ 458 crore
Number of Units		8.40 crore
Cost Per Unit		₹ 54.52
Return		
Capital Gain	(₹ 93.00 – ₹ 54.52)	₹ 38.48
Dividend	₹ 4 x 2	₹ 8.00
		₹ 46.48
Annualised Return	$\frac{46.48}{54.52} \times \frac{1}{4}$	21.31%

15. Net Issue Size = \$30 million

$$\text{Gross Issue} = \frac{\$30 \text{ million}}{0.96} = \$31.25 \text{ million}$$

Issue Price per GDR in ₹ (300 x 4 x 80%) ₹ 960

Issue Price per GDR in \$ (₹ 960/ ₹ 70)	\$13.71
Dividend per GDR (D_1) (₹ 2 x 4)	₹ 8
Net Proceeds per GDR (₹ 960 x 0.96)	₹ 921.60

(a) Number of GDR to be issued

$$\frac{\$31.25 \text{ million}}{\$13.71} = 2.2794 \text{ million}$$

(b) Cost of GDR to Right Ltd.

$$k_e = \frac{8}{921.60} + 0.20 = 20.87\%$$

16. Receipts using a forward contract = \$ 48,00,000/0.013889 = ₹ 34,55,97,235

Receipts using currency futures

The number of contracts needed is (\$ 48,00,000/0.013881)/
28,816,368 = 12

Initial margin payable is 12 contracts x ₹ 32,500 = ₹ 3,90,000

On April 1, 2020 Close at 0.013893

Receipts = US\$ 48,00,000/0.013894 = ₹ 34,54,72,866

Variation Margin

$[(0.013893 - 0.013881) \times 12 \times 28,816,368]/0.013894$

OR $(0.000012 \times 12 \times 28,816,368)/0.013894 = 4149.5570/$ = ₹ 2,98,658
0.013894

Less: Interest Cost – ₹ 3,90,000 x 0.09 x 3/12 ₹ 8,775

Net Receipts ₹ 34,57,62,749

Receipts under different methods of hedging

Forward contract ₹ 34,55,97,235

Future Contract ₹ 34,57,62,749

No Hedge (US\$ 48,00,000/ 0.013894) ₹ 34,54,72,866

The most advantageous option would have been to hedge with futures as it is slightly higher than Forward Option but comparing to no hedge option it is better proposition.

17. (a) (i) Receipt under three proposals

(a) Proposal of Mr. Grand

$$\text{Invoicing in £ will produce} = \frac{\text{€5.5 million}}{1.1990} = \text{£ 45, 87,156}$$

(b) Proposal of Mr. John

$$\text{Forward Rate} = \text{€1.1990} - 0.0055 = 1.1935$$

$$\text{Using Forward Market hedge Sterling receipt would be } \frac{\text{€5.5 million}}{1.1935} = \text{£ 46,08,295}$$

(c) Proposal of Ms. Royce

The equivalent sterling of the order placed based on future price (€1.1943)

$$= \frac{\text{€5.5 million}}{1.1943} = \text{£ 46, 05,208 (rounded off)}$$

$$\text{Number of Contracts} = \frac{\text{£46,05,208}}{70,500} = 65 \text{ Contracts (to the nearest whole number)}$$

$$\text{Thus, € amount hedged by future contract will be} = 65 \times \text{£70,500} = \text{£45,82,500}$$

Buy Future at €1.1943

Sell Future at €1.1873€0.0070

$$\text{Total loss on Future Contracts} = 65 \times \text{£70,500} \times \text{€0.0070} = \text{€32,078}$$

After 6 months

Amount Received €55, 00,000

Less: Loss on Future Contracts € 32,078€ 54, 67,922

Sterling Receipts

$$\text{On sale of € at spot} = \frac{\text{€54,67,922}}{1.1873} = \text{£46, 05,342}$$

Proposal of option (ii) is preferable because the option (i) & (iii) produces least receipts.

- (b) Further, in case of proposal (i) there must be a doubt as to whether this would be acceptable to German firm as it is described as a competitive market and Telereal Trillium is moving into it first time.

18. (a) **Maximum exchange ratio acceptable to the shareholders of ABC Ltd.**

Market Price of share of ABC Ltd. (₹ 3 x 8)	₹ 24
No. of Equity Shares	400 lakh
Market Capitalisation of ABC Ltd. (₹ 24 x 400 lakh)	₹ 9600 lakh
Combined Earnings (₹ 1200 + ₹ 400) lakh	₹ 1600 lakh
Combined Market Capitalisation (₹ 1600 lakh x 8)	₹ 12800 lakh
Market Capitalisation of ABC Ltd. (₹ 24x 400 lakh)	₹ 9600 lakh
Balance for XYZ Ltd.	₹ 3200 lakh

Let D be the no. of equity shares to be issued to XYZ Ltd. then,

$$\frac{₹ 3200 \text{ Lakh}}{\left(\frac{1600 \text{ Lakh}}{D + 400} \right) \times 8} = D$$

$$D = 133.333 \text{ lakh Shares}$$

$$\text{Exchange Ratio} = 133.333 / 200 = 0.6666:1$$

(b) **Minimum exchange ratio acceptable to the shareholders of XYZ Ltd.**

Market Price of share of XYZ Ltd.	₹ 14.00
No. of Equity Shares	200 lakh
Market Capitalisation of XYZ Ltd. (₹ 14.00 x 200 lakh)	₹ 2800 lakh
Combined Earnings (₹ 1200 + ₹ 400) lakh	₹ 1600 lakh
Combined Market Capitalisation (₹ 1600 lakh x 10)	₹ 16000 lakh
Balance for ABC Ltd.	₹ 13200 lakh

Let D be the no. of equity shares to be issued to XYZ Ltd. then,

$$\frac{₹ 2800 \text{ lakh}}{\left(\frac{1600 \text{ lakh}}{D + 400} \right) \times 10} = D$$

$$D = 84.8485 \text{ lakh Shares}$$

$$\text{Exchange Ratio} = 84.8485 / 200 = 0.4242:1$$

19. (a) ₹ 200 crore x 9 = ₹ 1800 crore

(b) $K_e = 6\% + 1.2 (11\% - 6\%) = 12\%$

$$= \frac{80 \text{ crore} \times 1.04}{0.12 - 0.04} = ₹ 1040 \text{ crore}$$

(c) ₹ 450 crore

(d) ₹ 450 crore + ₹ 200 crore – ₹ 50 crore = ₹ 600 crore

20. (a) To be financially sustainable, an organization must have following traits:

- ❖ have more than one source of income.
- ❖ have more than one way of generating income.
- ❖ do strategic, action and financial planning regularly.
- ❖ have adequate financial systems.
- ❖ have a good public image.
- ❖ be clear about its values (value clarity); and
- ❖ have financial autonomy.

(b) The differences between Financial and Operating Lease are as follows:

Basis	Financial Lease	Operating Lease
Term	It is an intermediate term to long-term arrangement.	The lease term is significantly less than the economic life of the equipment.
Cancellation	During the primary lease period, the lease cannot be cancelled.	It can be cancelled by the lessee prior to its expiration date.
Amortization	The lease is more or less fully amortized during the primary lease period.	The lease rental is generally not sufficient to fully amortize the cost of the asset.
Cost of Maintenance, taxes etc.	The costs of maintenance, taxes, insurance etc., are to be incurred by the lessee unless the contract provides otherwise.	The cost of maintenance, taxes, insurance are the responsibility of the lessor.
Risk of obsolescence	The lessee is required to take the risk of obsolescence.	The lessee is protected against the risk of obsolescence.

Nature of Arrangement	The lessor is only the Financier and is not interested in the asset.	The lessor has the option to recover the cost of the asset from another party on cancellation of the lease by leasing out the asset.
-----------------------	--	--

- (c) **CAMEL Model in Credit Rating:** Camel stands for Capital, Assets, Management, Earnings and Liquidity. The CAMEL model adopted by the rating agencies deserves special attention; it focuses on the following aspects-



- (i) *Capital*- Composition of external funds raised and retained earnings, fixed dividends component for preference shares and fluctuating dividends component for equity shares and adequacy of long-term funds adjusted to gearing levels, ability of issuer to raise further borrowings.
- (ii) *Assets*- Revenue generating capacity of existing/proposed assets, fair values, technological/physical obsolescence, linkage of asset values to turnover, consistency, appropriation of methods of depreciation and adequacy of charge to revenues, size, ageing and recoverability of monetary assets like receivables and its linkage with turnover.
- (iii) *Management*- Extent of involvement of management personnel, team-work, authority, timeliness, effectiveness and appropriateness of decision making along with directing management to achieve corporate goals.

- (iv) *Earnings*- Absolute levels, trends, stability, adaptability to cyclical fluctuations, ability of the entity to service existing and additional debts proposed.
- (v) *Liquidity*- Effectiveness of working capital management, corporate policies for stock and creditors, management and the ability of the corporate to meet their commitment in the short run.

These five aspects form the five core bases for estimating credit worthiness of an issuer which leads to the rating of an instrument. Rating agencies determine the pre-dominance of positive/negative aspects under each of these five categories and these are factored in for making the overall rating decision.

- (d) Debt Securitisation is a method of recycling of funds. This method is mostly used by finance companies to raise funds against financial assets such as loan receivables, mortgage backed receivables, credit card balances, hire purchase debtors, lease receivables, trade debtors, etc. and thus beneficial to such financial intermediaries to support their lending volumes. Thus, assets generating steady cash flows are packaged together and against this assets pool market securities can be issued. Investors are usually cash-rich institutional investors like mutual funds and insurance companies.

The process can be classified in the following three functions:

1. **The origination function** – A borrower seeks a loan from finance company, bank, housing company or a financial institution. On the basis of credit worthiness repayment schedule is structured over the life of the loan.
2. **The pooling function** – Many similar loans or receivables are clubbed together to create an underlying pool of assets. This pool is transferred in favour of a SPV (Special Purpose Vehicle), which acts as a trustee for the investor. Once the assets are transferred they are held in the organizers portfolios.
3. **The securitisation function** – It is the SPV's job to structure and issue the securities on the basis of asset pool. The securities carry coupon and an expected maturity, which can be asset base or mortgage based. These are generally sold to investors through merchant bankers. The investors interested in this type of securities are generally institutional investors like mutual fund, insurance companies etc. The originator usually keeps the spread available (i.e. difference) between yield from secured asset and interest paid to investors.

Generally, the process of securitisation is without recourse i.e. the investor bears the credit risk of default and the issuer is under an obligation to pay to investors only if the cash flows are received by issuer from the collateral.

(e) The salient features of FCCBs are as follows:

1. FCCB is a bond denominated in a foreign currency issued by an Indian company which can be converted into shares of the Indian Company denominated in Indian Rupees.
2. Prior permission of the Department of Economic Affairs, Government of India, Ministry of Finance is required for their issue
3. There will be a domestic and a foreign custodian bank involved in the issue
4. FCCB shall be issued subject to all applicable Laws relating to issue of capital by a company.
5. Tax on FCCB shall be as per provisions of Indian Taxation Laws and Tax will be deducted at source.
6. Conversion of bond to FCCB will not give rise to any capital gains tax in India.