

PAPER – 2: STRATEGIC FINANCIAL MANAGEMENT

QUESTIONS

Security Valuation

1. A hypothetical company ABC Ltd. issued a 10% Debenture (Face Value of ₹ 1000) of the duration of 10 years is currently trading at ₹ 850 per debenture. The bond is convertible into 50 equity shares being currently quoted at ₹ 17 per share.

If yield on equivalent comparable bond is 11.80%, then calculate the spread of yield of the above bond from this comparable bond.

The relevant present value table is as follows.

Present Values	t_1	t_2	t_3	t_4	t_5	t_6	t_7	t_8	t_9	t_{10}
$PVIF_{0.11, t}$	0.901	0.812	0.731	0.659	0.593	0.535	0.482	0.434	0.391	0.352
$PVIF_{0.13, t}$	0.885	0.783	0.693	0.613	0.543	0.480	0.425	0.376	0.333	0.295

2. Mr. A is thinking of buying shares at ₹ 500 each having face value of ₹ 100. He is expecting a bonus at the ratio of 1:5 during the fourth year. Annual expected dividend is 20% and the same rate is expected to be maintained on the expanded capital base. He intends to sell the shares at the end of seventh year at an expected price of ₹ 900 each. Incidental expenses for purchase and sale of shares are estimated to be 5% of the market price. He expects a minimum return of 12% per annum.

Should Mr. A buy the share? If so, what maximum price should he pay for each share? Assume no tax on dividend income and capital gain.

Portfolio Management

3. Consider the following information on two stocks, A and B:

Year	Return on A (%)	Return on B (%)
2016	10	12
2017	16	18

You are required to determine:

- The expected return on a portfolio containing A and B in the proportion of 40% and 60% respectively.
- The Standard Deviation of return from each of the two stocks.
- The covariance of returns from the two stocks.
- Correlation coefficient between the returns of the two stocks.

- (v) The risk of a portfolio containing A and B in the proportion of 40% and 60%.
4. A company has a choice of investments between several different equity oriented mutual funds. The company has an amount of ₹1 crore to invest. The details of the mutual funds are as follows:

Mutual Fund	Beta
A	1.6
B	1.0
C	0.9
D	2.0
E	0.6

Required:

- If the company invests 20% of its investment in each of the first two mutual funds and an equal amount in the mutual funds C, D and E, what is the beta of the portfolio?
- If the company invests 15% of its investment in C, 15% in A, 10% in E and the balance in equal amount in the other two mutual funds, what is the beta of the portfolio?
- If the expected return of market portfolio is 12% at a beta factor of 1.0, what will be the portfolios expected return in both the situations given above?

Mutual Fund

5. On 1st April 2009 Fair Return Mutual Fund has the following assets and prices at 4.00 p.m.

Shares	No. of Shares	Market Price Per Share (₹)
A Ltd.	10000	19.70
B Ltd.	50000	482.60
C Ltd.	10000	264.40
D Ltd.	100000	674.90
E Ltd.	30000	25.90
No. of units of funds		8, 00,000

Please calculate:

- NAV of the Fund on 1st April 2009.
- Assuming that on 1st April 2009, Mr. X, a HNI, send a cheque of ₹ 50,00,000 to the Fund and Fund Manager immediately purchases 18000 shares of C Ltd. and balance is held in bank. Then what will be position of fund.
- Now suppose on 2 April 2009 at 4.00 p.m. the market price of shares is as follows:

Shares	₹
A Ltd.	20.30
B Ltd.	513.70
C Ltd.	290.80
D Ltd.	671.90
E Ltd.	44.20

Then what will be new NAV.

Derivatives

6. Sensex futures are traded at a multiple of 50. Consider the following quotations of Sensex futures in the 10 trading days during February, 2009:

Day	High	Low	Closing
4-2-09	3306.4	3290.00	3296.50
5-2-09	3298.00	3262.50	3294.40
6-2-09	3256.20	3227.00	3230.40
7-2-09	3233.00	3201.50	3212.30
10-2-09	3281.50	3256.00	3267.50
11-2-09	3283.50	3260.00	3263.80
12-2-09	3315.00	3286.30	3292.00
14-2-09	3315.00	3257.10	3309.30
17-2-09	3278.00	3249.50	3257.80
18-2-09	3118.00	3091.40	3102.60

Abhishek bought one sensex futures contract on February, 04. The average daily absolute change in the value of contract is ₹ 10,000 and standard deviation of these changes is ₹ 2,000. The maintenance margin is 75% of initial margin.

You are required to determine the daily balances in the margin account and payment on margin calls, if any.

7. Consider a two-year call option with a strike price of ₹ 50 on a stock the current price of which is also ₹ 50. Assume that there are two-time periods of one year and in each year the stock price can move up or down by equal percentage of 20%. The risk-free interest rate is 6%. Using binominal option model, calculate the probability of price moving up and down. Also draw a two-step binomial tree showing prices and payoffs at each node.

Foreign Exchange Exposure and Risk Management

8. Excel Exporters are holding an Export bill in United States Dollar (USD) 1,00,000 due 60 days hence. They are worried about the falling USD value which is currently at ₹ 45.60 per USD. The concerned Export Consignment has been priced on an Exchange rate of ₹ 45.50 per USD. The Firm's Bankers have quoted a 60-day forward rate of ₹ 45.20.

Calculate:

- (i) Rate of discount quoted by the Bank
 - (ii) The probable loss of operating profit if the forward sale is agreed to.
9. An Indian importer has to settle an import bill for \$ 1, 30,000. The exporter has given the Indian exporter two options:
- (i) Pay immediately without any interest charges.
 - (ii) Pay after three months with interest at 5 percent per annum.

The importer's bank charges 15 percent per annum on overdrafts. The exchange rates in the market are as follows:

Spot rate (₹/\$): 48.35 /48.36

3-Months forward rate (₹/\$): 48.81 /48.83

The importer seeks your advice. Give your advice.

International Financial Management

10. ABC Ltd. is considering a project in US, which will involve an initial investment of US \$ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is ₹ 48 per US \$. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project is as follows:

Year	Cash inflow
1	US \$ 20,00,000
2	US \$ 25,00,000
3	US \$ 30,00,000
4	US \$ 40,00,000
5	US \$ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

Interest Rate Risk Management

11. Two companies ABC Ltd. and XYZ Ltd. approach the DEF Bank for FRA (Forward Rate Agreement). They want to borrow a sum of ₹ 100crores after 2 years for a period of 1 year. Bank has calculated Yield Curve of both companies as follows:

Year	XYZ Ltd.	ABC Ltd.*
1	3.86	4.12
2	4.20	5.48
3	4.48	5.78

*The difference in yield curve is due to the lower credit rating of ABC Ltd. compared to XYZ Ltd.

- (i) You are required to calculate the rate of interest DEF Bank would quote under 2V3 FRA, using the company's yield information as quoted above.
- (ii) Suppose bank offers Interest Rate Guarantee for a premium of 0.1% of the amount of loan, you are required to calculate the interest payable by XYZ Ltd. if interest rate in 2 years turns out to be
 - (a) 4.50%
 - (b) 5.50%

Corporate Valuation

12. A valuation done of an established company by a well-known analyst has estimated a value of ₹ 500 lakhs, based on the expected free cash flow for next year of ₹ 20 lakhs and an expected growth rate of 5%.

While going through the valuation procedure, you found that the analyst has made the mistake of using the book values of debt and equity in his calculation. While you do not know the book value weights he used, you have been provided with the following information:

- (i) Company has a cost of equity of 12%,
- (ii) After tax cost of debt is 6%,
- (iii) The market value of equity is three times the book value of equity, while the market value of debt is equal to the book value of debt.

You are required to estimate the correct value of the company.

Mergers, Acquisitions and Corporate Restructuring

13. Following information is provided relating to the acquiring company Mani Ltd. and the target company Ratnam Ltd:

	Mani Ltd.	Ratnam Ltd.
Earnings after tax (₹ lakhs)	2,000	4,000
No. of shares outstanding (lakhs)	200	1,000
P/E ratio (No. of times)	10	5

Required:

- (i) What is the swap ratio based on current market prices?
- (ii) What is the EPS of Mani Ltd. after the acquisition?
- (iii) What is the expected market price per share of Mani Ltd. after the acquisition, assuming its P/E ratio is adversely affected by 10%?
- (iv) Determine the market value of the merged Co.
- (v) Calculate gain/loss for the shareholders of the two independent entities, due to the merger.

Theoretical Questions

14. (a) Briefly explain the concept of Exchange Traded Fund.
(b) Briefly discuss the concept of Purchasing Power Parity.
(c) Explain the reasons of Reverse Stock Split.
15. (a) Explain the benefits of Securitization from the point of view of originator.
(b) Explain briefly the parameters to identify the currency risk.
(c) Compare and contrast start-ups and entrepreneurship. Describe the priorities and challenges which start-ups in India are facing.

SUGGESTED ANSWERS/HINTS

1. Conversion Price = ₹ 50 x 17 = ₹ 850
Intrinsic Value = ₹ 850
Accordingly the yield (r) on the bond shall be:
$$₹ 850 = ₹ 100 \text{ PVAF } (r, 10) + ₹ 1000 \text{ PVF } (r, 10)$$

Let us discount the cash flows by 11%
$$850 = 100 \text{ PVAF } (11\%, 10) + 1000 \text{ PVF } (11\%, 10)$$

$$850 = 100 \times 5.890 + 1000 \times 0.352$$

$$= 91$$

Now let us discount the cash flows by 13%

$$850 = 100 \text{ PVAF } (13\%, 10) + 1000 \text{ PVF } (13\%, 10)$$

$$850 = 100 \times 5.426 + 1000 \times 0.295$$

$$= -12.40$$

Accordingly, IRR

$$11\% + \frac{90.90}{90.90 - (-12.40)} \times (13\% - 11\%)$$

$$11\% + \frac{90.90}{103.30} \times (13\% - 11\%)$$

$$= 12.76\%$$

The spread from comparable bond = 12.76% - 11.80% = 0.96%

2. P.V. of dividend stream and sales proceeds

Year	Dividend/Sale	PVF (12%)	PV (₹)
1	₹ 20/-	0.893	17.86
2	₹ 20/-	0.797	15.94
3	₹ 20/-	0.712	14.24
4	₹ 24/-	0.636	15.26
5	₹ 24/-	0.567	13.61
6	₹ 24/-	0.507	12.17
7	₹ 24/-	0.452	10.85
7	₹ 1026/- (₹ 900 x 1.2 x 0.95)	0.452	<u>463.75</u>
			₹ 563.68
	Less: Cost of Share (₹ 500 x 1.05)		<u>₹ 525.00</u>
	Net gain		<u>₹ 38.68</u>

Since Mr. A is gaining ₹ 38.68 per share, he should buy the share.

Maximum price Mr. A should be ready to pay is ₹ 563.68 which will include incidental expenses. So the maximum price should be ₹ 563.68 x 100/105 = ₹ 536.84

3. (i) Expected return of the portfolio A and B

$$E(A) = (10 + 16) / 2 = 13\%$$

$$E(B) = (12 + 18) / 2 = 15\%$$

$$R_p = \sum_{i=1}^N X_i R_i = 0.4(13) + 0.6(15) = 14.2\%$$

(ii) Stock A:

$$\text{Variance} = 0.5 (10 - 13)^2 + 0.5 (16 - 13)^2 = 9$$

$$\text{Standard deviation} = 3\%$$

Stock B:

$$\text{Variance} = 0.5 (12 - 15)^2 + 0.5 (18 - 15)^2 = 9$$

$$\text{Standard deviation} = 3\%$$

(iii) Covariance of stocks A and B

$$\text{CovAB} = 0.5 (10 - 13) (12 - 15) + 0.5 (16 - 13) (18 - 15) = 9$$

(iv) Correlation of coefficient

$$r_{AB} = \frac{\text{Cov}_{AB}}{\sigma_A \sigma_B} = \frac{9}{3 \times 3} = 1$$

(v) Portfolio Risk

$$\begin{aligned} \sigma_p &= \sqrt{X_A^2 \sigma_A^2 + X_B^2 \sigma_B^2 + 2X_A X_B (\sigma_A \sigma_B \sigma_{AB})} \\ &= \sqrt{(0.4)^2 (3)^2 + (0.6)^2 (3)^2 + 2(0.4)(0.6)(3)(3)(1)} \\ &= \sqrt{1.44 + 3.24 + 4.32} \\ &= 3\% \end{aligned}$$

4. With 20% investment in each MF Portfolio Beta is the weighted average of the Betas of various securities calculated as below:

(i)

Investment	Beta (β)	Investment (₹ Lacs)	Weighted Investment
A	1.6	20	32
B	1.0	20	20
C	0.9	20	18
D	2.0	20	40
E	0.6	20	12
		100	122
Weighted Beta (β) = 1.22			

(ii) With varied percentages of investments portfolio beta is calculated as follows:

Investment	Beta (β)	Investment (₹ Lacs)	Weighted Investment
A	1.6	15	24
B	1.0	30	30
C	0.9	15	13.5
D	2.0	30	60
E	0.6	10	6
		<u>100</u>	<u>133.5</u>
Weighted Beta (β) = 1.335			

(iii) Expected return of the portfolio with pattern of investment as in case (i)

$$= 12\% \times 1.22 \text{ i.e. } 14.64\%$$

Expected Return with pattern of investment as in case (ii) = $12\% \times 1.335$ i.e., 16.02%.

5. (a) **NAV of the Fund.**

$$\frac{₹ 1,97,000 + ₹ 2,41,30,000 + ₹ 26,44,000 + ₹ 6,74,90,000 + ₹ 7,77,000}{800000}$$

$$\frac{₹ 9,52,38,000}{800000} = ₹ 119.0475 \text{ rounded to } ₹ 119.05$$

(b) **The revised position of fund shall be as follows:**

Shares	No. of shares	Price	Amount (₹)
A Ltd.	10000	19.70	1,97,000
B Ltd.	50000	482.60	2,41,30,000
C Ltd.	28000	264.40	74,03,200
D Ltd.	100000	674.90	674,90,000
E Ltd.	30000	25.90	7,77,000
Cash			<u>2,40,800</u>
			<u>10,02,38,000</u>

$$\text{No. of units of fund} = 800000 + \frac{5000000}{119.0475} = 8,42,000$$

(c) **On 2nd April 2009, the NAV of fund will be as follows:**

Shares	No. of shares	Price	Amount (₹)
A Ltd.	10000	20.30	2,03,000

B Ltd.	50000	513.70	2,56,85,000
C Ltd.	28000	290.80	81,42,400
D Ltd.	100000	671.90	6,71,90,000
E Ltd.	30000	44.20	13,26,000
Cash			<u>2,40,800</u>
			<u>10,27,87,200</u>

$$\text{NAV as on 2nd April 2009} = \frac{\text{₹ } 10,27,87,200}{842000} = \text{₹ } 122.075 \text{ per unit}$$

6. Initial Margin = $\mu + 3\sigma$

Where μ = Daily Absolute Change

σ = Standard Deviation

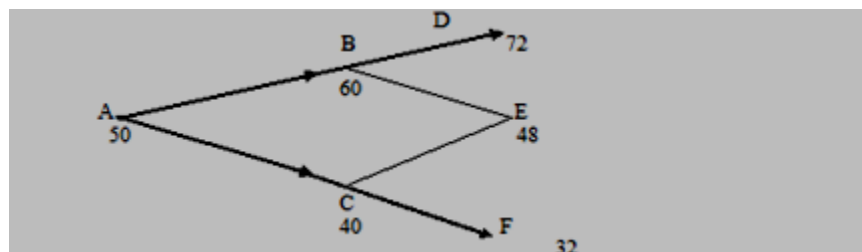
Accordingly,

$$\text{Initial Margin} = \text{₹ } 10,000 + \text{₹ } 6,000 = \text{₹ } 16,000$$

$$\text{Maintenance margin} = \text{₹ } 16,000 \times 0.75 = \text{₹ } 12,000$$

Day	Changes in future Values (₹)	Margin A/c (₹)	Call Money (₹)
4/2/09	-	16000	-
5/2/09	$50 \times (3294.40 - 3296.50) = -105$	15895	-
6/2/09	$50 \times (3230.40 - 3294.40) = -3200$	12695	-
7/2/09	$50 \times (3212.30 - 3230.40) = -905$	16000	4210
10/2/09	$50 \times (3267.50 - 3212.30) = 2760$	18760	-
11/2/09	$50 \times (3263.80 - 3267.50) = -185$	18575	-
12/2/09	$50 \times (3292 - 3263.80) = 1410$	19985	-
14/2/09	$50 \times (3309.30 - 3292) = 865$	20850	-
17/2/09	$50 \times (3257.80 - 3309.30) = -2575$	18275	-
18/2/09	$50 \times (3102.60 - 3257.80) = -7760$	16000	5485

7. Stock prices in the two step Binominal tree

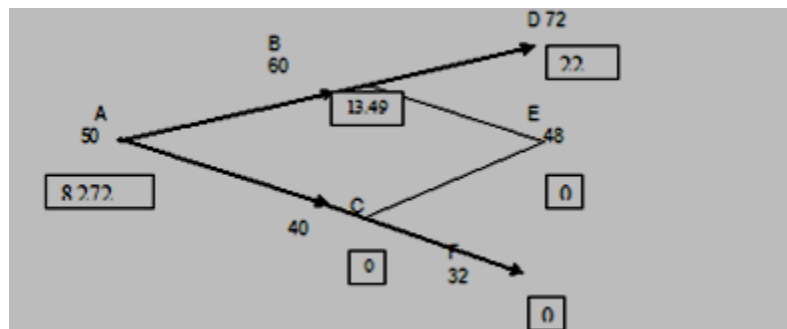


Using the single period model, the probability of price increase is

$$P = \frac{R - d}{u - d} = \frac{1.06 - 0.80}{1.20 - 0.80} = \frac{0.26}{0.40} = 0.65$$

Therefore the p of price decrease = $1 - 0.65 = 0.35$

The two step Binominal tree showing price and pay off



The value of an American call option at nodes D, E and F will be equal to the value of European option at these nodes and accordingly the call values at nodes D, E and F will be 22, 0 and 0 using the single period binomial model the value of call option at node B is

$$C = \frac{C_u p + C_d(1-p)}{R} = \frac{22 \times 0.65 + 0 \times 0.35}{1.06} = 13.49$$

The value of option at node 'A' is

$$\frac{13.49 \times 0.65 + 0 \times 0.35}{1.06} = 8.272$$

8. (i) Rate of discount quoted by the bank

$$= \frac{(45.20 - 45.60) \times 365 \times 100}{45.60 \times 60} = 5.33\%$$

- (ii) Probable loss of operating profit:

$$(45.20 - 45.50) \times 1,00,000 = ₹ 30,000$$

9. If importer pays now, he will have to buy US\$ in Spot Market by availing overdraft facility. Accordingly, the outflow under this option will be

	₹
Amount required to purchase \$1,30,000 [\$1,30,000 × ₹48.36]	62,86,800
Add: Overdraft Interest for 3 months @15% p.a.	2,35,755
	65,22,555

If importer makes payment after 3 months then, he will have to pay interest for 3 months @ 5% p.a. for 3 month along with the sum of import bill. Accordingly, he will have to buy \$ in forward market. The outflow under this option will be as follows:

	\$
Amount of Bill	1,30,000
Add: Interest for 3 months @5% p.a.	1,625
	<u>1,31,625</u>

Amount to be paid in Indian Rupee after 3 month under the forward purchase contract
 ₹ 64,27,249 (US\$ 1,31,625 X ₹ 48.83)

Since outflow of cash is least in (ii) option, it should be opted for.

10. $(1 + 0.12) (1 + \text{Risk Premium}) = (1 + 0.14)$

Or, $1 + \text{Risk Premium} = 1.14/1.12 = 1.0179$

Therefore, Risk adjusted dollar rate is $= 1.0179 \times 1.08 = 1.099 - 1 = 0.099$

Calculation of NPV

Year	Cash flow (Million) US\$	PV Factor at 9.9%	P.V.
1	2.00	0.910	1.820
2	2.50	0.828	2.070
3	3.00	0.753	2.259
4	4.00	0.686	2.744
5	5.00	0.624	<u>3.120</u>
			12.013
		Less: Investment	<u>11.000</u>
		NPV	<u>1.013</u>

Therefore, Rupee NPV of the project is $= ₹ (48 \times 1.013)$ Million

$= ₹ 48.624$ Million

11. (i) DEF Bank will fix interest rate for 2V3 FRA after 2 years as follows:

XYZ Ltd.

$$(1+r) (1+0.0420)^2 = (1+0.0448)^3$$

$$(1+r) (1.0420)^2 = (1.0448)^3$$

$$r = 5.04\%$$

Bank will quote 5.04% for a 2V3 FRA.

ABC Ltd.

$$(1+r) (1+0.0548)^2 = (1+0.0578)^3$$

$$(1+r) (1.0548)^2 = (1.0578)^3$$

$$r = 6.38\%$$

Bank will quote 6.38% for a 2V3 FRA.

(ii)

		4.50% - Allow to Lapse	5.50%-Exercise
Interest	₹ 100 crores X 4.50%	₹ 4.50 crores	-
	₹ 100 crores X 5.04%	-	₹ 5.04 crores
Premium (Cost of Option)	₹ 100 crores X 0.1%	₹ 0.10 crores	₹ 0.10 crores
		4.60 crores	5.14 crores

12. Cost of capital by applying Free Cash Flow to Firm (FCFF) Model is as follows:-

$$\text{Value of Firm} = V_0 = \frac{\text{FCFF}_1}{K_c - g_n}$$

Where –

FCFF₁ = Expected FCFF in the year 1

K_c = Cost of capital

g_n = Growth rate forever

Thus, ₹ 500 lakhs = ₹ 20 lakhs / (K_c - g)

Since g = 5%, then K_c = 9%

Now, let X be the weight of debt and given cost of equity = 12% and cost of debt = 6%, then 12% (1 - X) + 6% X = 9%

Hence, X = 0.50, so book value weight for debt was 50%

∴ Correct weight should be 150% of equity and 50% of debt.

∴ Cost of capital = K_c = 12% (0.75) + 6% (0.25) = 10.50%

and correct firm's value = ₹ 20 lakhs / (0.105 - 0.05) = ₹ 363.64 lakhs.

13. (i) SWAP ratio based on current market prices:

EPS before acquisition:

Mani Ltd. : ₹2,000 lakhs / 200 lakhs: ₹10

Ratnam Ltd.: ₹4,000 lakhs / 1,000 lakhs: ₹ 4

Market price before acquisition:

Mani Ltd.: ₹10 × 10 ₹100

Ratnam Ltd.: ₹4 × 5 ₹ 20

SWAP ratio: 20/100 or 1/5 i.e. 0.20

(ii) EPS after acquisition:

$$\frac{\text{₹}(2,000 + 4,000) \text{ Lakhs}}{(200 + 200) \text{ Lakhs}} = ₹15.00$$

(iii) Market Price after acquisition:

EPS after acquisition : ₹15.00

P/E ratio after acquisition 10 × 0.9 9

Market price of share (₹ 15 X 9) ₹135.00

(iv) Market value of the merged Co.:

₹135 × 400 lakhs shares ₹ 540.00 Crores
or ₹ 54,000 Lakhs

(v) Gain/loss per share:

₹ Crore

	Mani Ltd.	Ratnam Ltd.
Total value before Acquisition	200	200
Value after acquisition	<u>270</u>	<u>270</u>
Gain (Total)	<u>70</u>	<u>70</u>
No. of shares (pre-merger) (lakhs)	200	1,000
Gain per share (₹)	35	7

- 14. (a)** Exchange Traded Funds (ETFs) were introduced in US in 1993 and came to India around 2002. ETF is a hybrid product that combines the features of an index mutual fund and stock and hence, is also called index shares. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

ETF can be bought and sold like any other stock on stock exchange. In other words, they can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. NAV of an ETF is the value

of the underlying component of the benchmark index held by the ETF plus all accrued dividends less accrued management fees.

There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker.

Some other important features of ETF are as follows:

1. It gives an investor the benefit of investing in a commodity without physically purchasing the commodity like gold, silver, sugar etc.
2. It is launched by an asset management company or other entity.
3. The investor does not need to physically store the commodity or bear the costs of upkeep which is part of the administrative costs of the fund.
4. An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed-end fund, which trades throughout the trading day at prices that may be more or less than its net asset value.

(b) **Purchasing Power Parity (PPP):** Purchasing Power Parity theory focuses on the 'inflation – exchange rate' relationship. There are two forms of PPP theory:-

The ABSOLUTE FORM, also called the 'Law of One Price' suggests that "prices of similar products of two different countries should be equal when measured in a common currency". If a discrepancy in prices as measured by a common currency exists, the demand should shift so that these prices should converge.

The RELATIVE FORM is an alternative version that accounts for the possibility of market imperfections such as transportation costs, tariffs, and quotas. It suggests that 'because of these market imperfections, prices of similar products of different countries will not necessarily be the same when measured in a common currency.' However, it states that the rate of change in the prices of products should be somewhat similar when measured in a common currency, as long as the transportation costs and trade barriers are unchanged.

The formula for computing the forward rate using the inflation rates in domestic and foreign countries is as follows:

$$F = S \frac{(1+i_D)}{(1+i_F)}$$

Where F = Forward Rate of Foreign Currency and S = Spot Rate

i_D = Domestic Inflation Rate and i_F = Inflation Rate in foreign country

Thus PPP theory states that the exchange rate between two countries reflects the relative purchasing power of the two countries i.e. the price at which a basket of goods can be bought in the two countries.

- (c) **‘Reverse Stock Split’** is a process whereby a company decreases the number of shares outstanding by combining current shares into fewer or lesser number of shares. For example, in a 5:1 reverse split, a company would take back 5 shares and will replace them with one share.

Although, reverse stock split does not result in change in Market value or Market Capitalization of the company but it results in increase in price per share.

Considering above mentioned ratio, if company has 100 million shares outstanding before split up, the number of shares would be equal to 20 million after the reverse split up.

Reasons for Reverse Split Up

Generally, company carries out reverse split up due to following reasons:

- (i) Avoiding delisting from stock exchange: Sometimes as per the stock exchange regulation if the price of shares of a company goes below a limit it can be delisted. To avoid such delisting company may resort to reverse stock split up.
 - (ii) Avoiding removal from constituents of Index: If company's share is one of the constituents of market index then to avoid their removal of scrip from this list, the company may take reverse split up route.
 - (iii) To avoid the tag of “Penny Stock”: If the price of shares of a company goes below a limit it may be called “Penny Stock”. In order to improve the image of the company and avoiding this stage, the company may go for Reverse Stock Split.
 - (iv) To attract Institutional Investors and Mutual Funds: It might be possible that institutional investors may be shying away from acquiring low value shares to attract these investors the company may adopt the route of “Reverse Stock Split” to increase the price per share.
15. (a) Originator (entity which sells assets collectively to Special Purpose Vehicle) achieves the following benefits from securitization:
- (i) **Off – Balance Sheet Financing:** When loan/receivables are securitized it releases a portion of capital tied up in these assets resulting in off Balance Sheet financing leading to improved liquidity position which helps expanding the business of the company.
 - (ii) **More specialization in main business:** By transferring the assets the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non-recourse arrangement even the burden of default is shifted.
 - (iii) **Helps to improve financial ratios:** Especially in case of Financial Institutions and Banks, it helps to manage Capital-To-Weighted Asset Ratio effectively.
 - (iv) **Reduced borrowing Cost:** Since securitized papers are rated due to credit enhancement even they can also be issued at reduced rate as of debts and

hence the originator earns a spread, resulting in reduced cost of borrowings.

(b) Some of the parameters to identify the currency risk are as follows:

- (i) **Government Action:** The Government action of any country has visual impact in its currency. For example, the UK Govt. decision to divorce from European Union i.e. Brexit brought the pound to its lowest since 1980's.
- (ii) **Nominal Interest Rate:** As per interest rate parity (IRP) the currency exchange rate depends on the nominal interest of that country.
- (iii) **Inflation Rate:** Purchasing power parity theory impact the value of currency.
- (iv) **Natural Calamities:** Any natural calamity can have negative impact.
- (v) **War, Coup, Rebellion etc.:** All these actions can have far reaching impact on currency's exchange rates.
- (vi) **Change of Government:** The change of government and its attitude towards foreign investment also helps to identify the currency risk.

(c) **Differences between a start-up and entrepreneurship**

Startups are different from entrepreneurship. The major differences between them have been discussed in the following paragraphs:

- (i) Start up is a part of entrepreneurship. Entrepreneurship is a broader concept and it includes a startup firm.
- (ii) The main aim of startup is to build a concern, conceptualize the idea which it has developed into a reality and build a product or service. On the other hand, the major objective of an already established entrepreneurship concern is to attain opportunities with regard to the resources they currently control.
- (iii) A startup generally does not have a major financial motive whereas an established entrepreneurship concern mainly operates on financial motive.

Priorities and challenges which start-ups in India are facing

The priority is on bringing more and more smaller firms into existence. So, the focus is on need based, instead of opportunity based entrepreneurship. Moreover, the trend is to encourage self-employment rather than large, scalable concerns. The main challenge with the startup firms is getting the right talent. And, paucity of skilled workforce can hinder the chances of a startup organization's growth and development. Further, startups had to comply with numerous regulations which escalate its cost. It leads to further delaying the chances of a breakeven or even earning some amount of profit.