SSEI
Sanjay Saraf Educational Institute Pvt. Ltd.
A positive NPV Training Center

CA FINAL

Strategic Financial Management

Jan 2021 (New Syllabus)

Paper Analysis

- Sanjay Saraf Sir

Powered by -

SSEI QFORUM

ULURN
KNOWLEDGE IN DEPTH

SSEI
Sanjay Saraf Educational Institute Pvt. Ltd.
A positive NPV Training Center

Introduction

CA Final SFM has entered into an altogether different trajectory. There are totally new questions coming. Those that are repeated are also twisted. Gone are the days where one can just mug up practice manual and score high marks. Now is the time to study the subject in excruciating details.

For this we have-

- Review class on youtube
- Challenger series on youtube
- New types of sums on youtube.

We also have-

- Money market lectures on ULURNAPP
- Super 100 series on ULURNAPP

The biggest resource is the Qforum...study hard, enquire rather than accept...raise doubts on Qforum, appear for mocks on Qforum -take it as a challenge- show your character..there is no one more prepared than you are on this planet earth...this feeling should resonate in you.

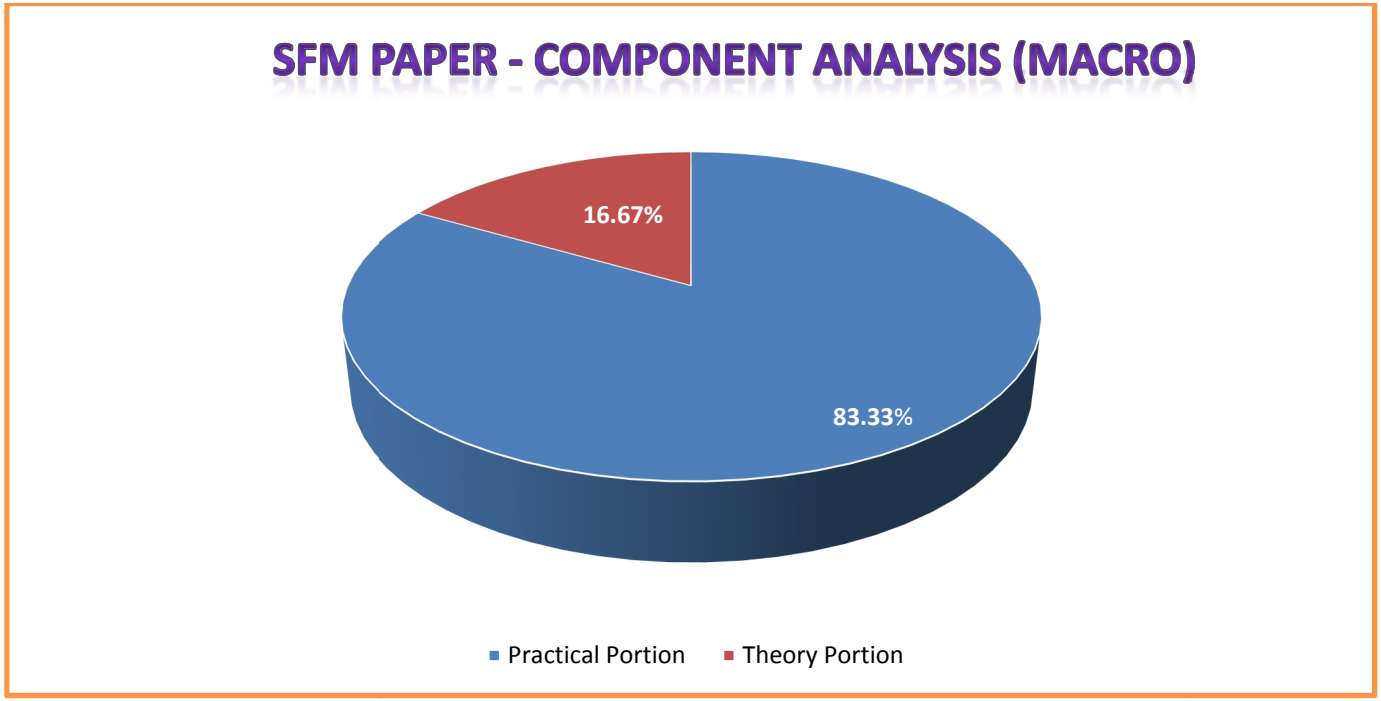
Sanjay Saraf Sir

Q. no.	Broad Topic	Sub Topic	Marks	Percentage	Sanjay Sir's Comments
1(a)	PORTFOLIO MANAGEMENT	Efficient Market Hypothesis (Autocorrelation Test)	8	6.67%	*This is a sum on Auto correlation test - A test designed to check weak form of efficiency. It is a simple sum. The issue is that nobody knows whether it is in the syllabus or not. I have always done this sum in class for the past 20 years. It is in fact even present in the first batch of the new syllabus study mat provided by* ***SSEI - page no. 32, question no. 84 reproduced below.***
1(b)	FOREX	International Project Appraisal	8	6.67%	*The confusion in this sum is that exchange rate is not given. Students have to smartly think about how a representative and logical solution can be done.* ***A similar but advance sum done in class was page no. 106, problem no. 1***
1(c)	FINANCIAL POLICY AND CORPORATE STRATEGY	Financial Decisions	4	3.33%	*This is direct theory question from* ***CHAPTER 1 : FINANCIAL POLICY AND CORPORATE STRATEGY****.*
2(a)	MUTUAL FUND	Dividend Equalization Reserve	8	6.67%	*This is sum on dividend equalization reserve that had come in the past. There is less chance that people would have seen the sum and gone except those who are perfectionist and ensure that they do everything that has been done in class. So, if you would have done the sum at home you would be able to do it in exam otherwise there is risk involved.* ***Similar sum page no. 226, problem no. 24***
2(b)	FOREX	International Project Appraisal	8	6.67%	*This is sum on international project appraisal - the typical sum that used to come - home currency approach and foreign currency approach. So, we had to do it by foreign currency approach and second part of the sum, they are saying that withholding tax 10%, so it is common sense that we have to reduce cash flows by 10% and then recalculate NPV. I think this was one of the easiest sum in the entire paper.* ***Similar sum page no. 7, problem no. 4.***
2(c)	SECURITIZATION	Features	4	3.33%	*This is direct theory question from* ***CHAPTER 6 : SECURITIZATION****. It was also present in our SSEI mat page number 58.*
3(a)	DERIVATIVES	Futures Margin Requirement	8	6.67%	*This is a sum on Margin maintenance and Mark to market feature of futures contract. Such a sum has come in past but when it came in the past, we were given μ and σ. So initial margin was calculated as μ + 3σ and maintenance margin was calculated as 75% of initial but in this sum, initial margin and maintenance margin is given as percentage of contract value. Rest everything is same. It is stupid on the part of CA institute to ask us to calculate profit/loss for the long position as well as the short position because we know that futures and options are a zero sum game - so, it will be equal in magnitude but opposite in sign.* ***Similar sum done in class page no. 25, problem no. 22***

Q. no.	Broad Topic	Sub Topic	Marks	Percentage	Sanjay Sir's Comments
3(b)	FOREX	Negotiation of Bill under LC	8	6.67%	*This is a typical sum on cross rate ₹/$ is given $/€ is given we multiply to get ₹/€. The only problem is that there is transit period of 20 days given, so you have to find out the 60 days rate, the 80 day rate take whichever is lower because the exporter has to loose.* ***Similar sum done in class in page no. 37, problem no. 29***
3(c)	BOND VALUATION	Spot and Forward Rates	4	3.33%	*This is a direct sum on Spot and Forward Rates in the bond valuation chapter.* ***Similar Sum page no. 159, problem no. 3***
4(a)	MERGERS AND ACQUISITION	Equitable Exchange Ratio	12	10.00%	*This sum has been repeated in past SFM papers (both old syllabus and new syllabus) a large number of times. It has been done in class. It is one of the best sums - no ambiguity.* ***Similar sum page no.354, problem no. 48***
4(b)	DERIVATIVES	Futures Trading	4	3.33%	*It is a repeated sum from past papers. It is actually too easy. Pick up any Tom, Dick or Harry from the street who trades in stock market and he will give you the answer in a movement.* ***Similar sum done in class page no.56, problem no.46***
4(c)	STARTUP	Stages in VC financing	4	3.33%	*This is direct theory question from* ***CHAPTER 14 : STARTUP FINANCE****. It was also present in our SSEI mat page number 86.*
5(a)	PORTFOLIO MANAGEMENT	Expected Return and Risk of Portfolio - Stats	10	8.33%	*This question is based on simple statistics in which we have to calculate the Mean, Standard deviation, Correlation, Covariance. The problem in this sum is that instead of returns, prices are given, so it is time consuming. You have to convert prices into returns. Some people would calculate returns as change in price. That could be very very surprising - return is always percentage change in price, so doing this correctly means that your calculation speed and calculation efficiency is very high.* ***Similar sum in our mat page no. 56 problem no. 32***
5(b)	MERGERS AND ACQUISITION	Purchase Consideration	6	5.00%	*This is a repeated sum. It is focusing on the value of plant.* ***Similar sum done in class page no.318, problem no.30***
5(c)	STARTUP	Non Bank Sources of Finance	4	3.33%	*This is direct theory question from* ***CHAPTER 14 : STARTUP FINANCE****. It was also present in our SSEI mat page number 71.*
6(a)	OUT OF SYLLABUS	External Funds Required	8	6.67%	*I do not know if syllabus for SFM has changed since Nov 2019. From this term onwards, ICAI has been giving one sum on ratio analysis or so to say - general knowledge. Its like "Aaa dekhen zara, kisme kitna hai dum". So what should I say..... its like test of intrinsic immunity..... got to take vaccine I believe.* ***This sum was not done in class.***

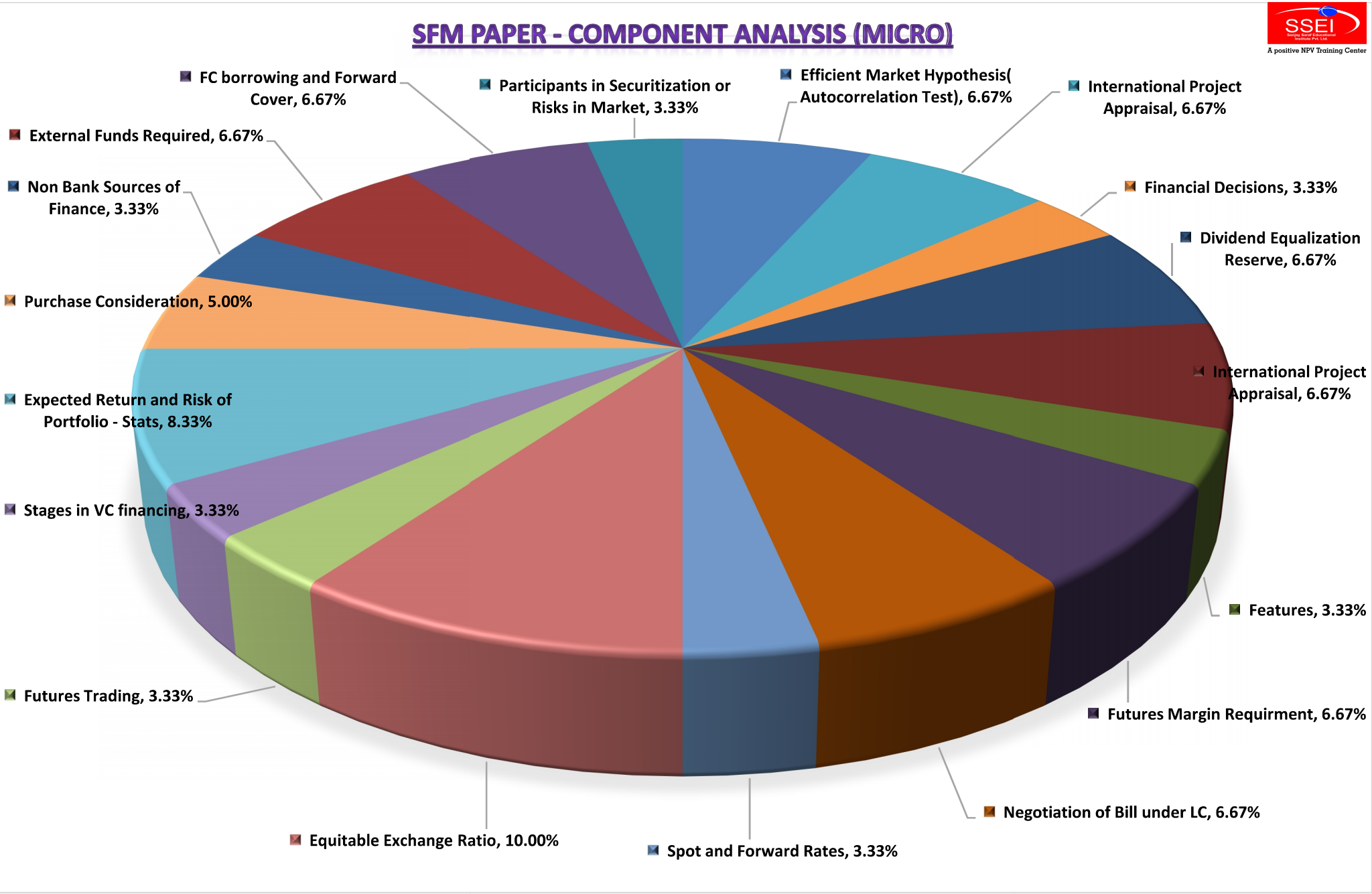
Q. no.	Broad Topic	Sub Topic	Marks	Percentage	Sanjay Sir's Comments
6(b)	FOREX	FC borrowing and Forward Cover	8	6.67%	*This is common sensical sum on Foreign Exchange of course, it is not repeated from the past. However, student would have been able to do it.* ***Similar sum in our book page number 68, Problem no. 53***
6(c)	SECURITIZATION or RISK MANAGEMENT	Participants in Securitization or Risks in Market	4	3.33%	*This is direct theory question from* ***CHAPTER 6 : SECURITIZATION****. It was also present in our SSEI mat page number 60.* ***OR*** *It is not clear as to whether ICAI will provide answer to this question from* ***CHAPTER 5 : PORTFOLIO MANAGEMENT*** *or from* ***CHAPTER 2 : RISK MANAGEMENT***
			120		

Practical Portion	**100**	**83.33%**
Theory Portion	**20**	**16.67%**
Total	**120**	**100%**



SFM PAPER - COMPONENT ANALYSIS (MICRO)

SSEI
A positive NPV Training Center



Question 1.

a. Mr. X is of the opinion that market has recently shown the Weak Form of Market Efficiency. In order to test the validity of his impression he has collected the following data relating to the movement of the SENSEX for the last 20 days.

Days	Open	High	Low	Close
1	33470.94	33513.79	33438.03	33453.99
2	33453.64	33478.11	33427.82	33434.83
3	33414.06	33440.29	33397.65	33431.93
4	33434.94	33446.18	33377.78	33383.41
5	33372.92	33380.27	33352.12	33370.93
6	33375.85	33389.49	33331.42	33340.75
7	33340.89	33340.89	33310.95	33330.98
8	33326.84	33340.91	33306.17	33335.08
9	33307.16	33328.22	33296.43	33301.97
10	33298.64	33318.60	33254.28	33259.03
11	33260.04	33228.85	33241.66	33251.53
12	33255.92	33289.46	33249.46	33285.89
13	33288.86	33535.67	33255.98	33329.28
14	33335.00	33346.21	33276.72	33284.17
15	33293.83	33310.86	33278.54	33298.78
16	33300.02	33337.79	33300.02	33325.38
17	33323.36	33356.34	33322.44	33329.95
18	33322.81	33345.98	33317.44	33319.67
19	33317.51	33321.18	33294.19	33302.32
20	33290.86	33324.96	33279.62	33319.61

You are required :

To test the **Weak Form of Market Efficiency** using Auto-Correlation test, taking time lag of 10 days.

Answer :

We defined -

X= Δ % in price of first 10 days

Y= Δ % in price of last 10 days

X= Δ % in price of first 10 days	Y= Δ % in price of last 10 days
(19.16)	34.36
(2.9)	43.39
(48.52)	(45.11)
(12.48)	14.61
(30.18)	26.6
(9.77)	4.57
4.1	(10.28)
(33.11)	(17.35)
(42.94)	17.29

Let us now calculate the coefficient of correlation between x and y

X	Y	$(x-\bar{x})$ dx	$(y-\bar{y})$ dy	dx^2	dy^2	Dx ×dy
(19.16)	34.36	2.5	26.8	6.28	718.24	67
(2.9)	43.39	18.76	35.83	351.94	1283.79	672.17
(48.52)	(45.11)	(26.86)	(52.67)	721.46	2774.13	1414.72
(12.48)	14.61	9.18	7.05	84.27	49.70	64.72
(30.18)	26.6	(8.52)	19.04	72.60	362.52	(162.22)
(9.77)	4.57	11.89	(2.99)	141.37	8.94	(35.55)
4.1	(10.28)	25.76	(17.84)	663.58	318.27	(459.56)
(33.11)	(17.35)	(11.45)	(24.91)	131.10	620.51	285.22
(42.94)	17.29	(21.28)	(9.73)	452.84	94.67	(207.05)
(194.96)	**68.08**			**2625.41**	**6230.78**	**1639**

$\bar{x}$ = (21.66) $\bar{y}$ = 7.56

$\sigma_x = \sqrt{\frac{2625.41}{9}} = 17.08$

$\sigma_y = \sqrt{\frac{6230.78}{9}} = 26.31$

Cov (x,y) = 1639/9 = 182.11

$$\text{coefficient of correlation}(\rho) = \frac{182.11}{17.08 \times 26.31} = 0.4$$

Since $\rho \neq 0$, market is weakly inefficient.

Sanjay Sir's Comment:

This is a sum on Auto correlation test - A test designed to check weak form of efficiency. It is a simple sum. The issue is that nobody knows whether it is in the syllabus or not. I have always done this sum in class for the past 20 years. It is in fact even present in the first batch of the new syllabus study mat provided by ***SSEI - page no. 32, question no. 84 reproduced below.***

14	4560
15	4600

You are required to perform a runs test and determine the independence of data at 10% level of significance.

84. Mr. Praneet Sharma feels Indian stock market during January 2004 has exhibited weak form of market efficiency. In order to test the validity of his impression, he collected following data relating to movement of Nifty for the 20 trading days in January 2004 :

Date	Open	High	Low	Close
01-Jan-2004	1880.35	1917.05	1880.35	1912.25
02-Jan-2004	1912.25	1951.70	1911.05	1946.05
05-Jan-2004	1946.30	1969.20	1930.75	1955.00
06-Jan-2004	1955.10	1979.05	1908.75	1926.70
07-Jan-2004	1927.95	1930.95	1888.10	1916.75
08-Jan-2004	1918.10	1973.45	1918.10	1968.55
09-Jan-2004	1969.00	2014.65	1957.45	1971.90
12-Jan-2004	1972.00	1980.55	1936.75	1945.60
13-Jan-2004	1944.70	1967.85	1926.10	1963.60
14-Jan-2004	1987.40	1995.20	1970.10	1982.15
15-Jan-2004	1983.20	2000.30	1933.25	1944.45
16-Jan-2004	1944.15	1953.05	1887.10	1900.65
19-Jan-2004	1901.90	1943.10	1874.95	1935.35
20-Jan-2004	1928.80	1957.65	1876.85	1893.25
21-Jan-2004	1895.45	1899.55	1811.35	1824.60
22-Jan-2004	1824.70	1854.55	1756.25	1770.50
23-Jan-2004	1771.10	1858.50	1771.10	1847.55
27-Jan-2004	1847.90	1911.30	1844.65	1904.70
28-Jan-2004	1903.90	1918.45	1846.35	1863.10
29-Jan-2004	1863.00	1883.10	1827.25	1843.60

You are **required** to test the weak form of efficient market hypothesis using the autocorrelation test, taking a time lag of 10 days.

Students keep on asking about new sums and amendment ..... the problem is its all there on SSEI website free resources section - naked truth can never be seen - something which is free is of no value.

b. A proposed foreign investment involves creation of a plant with an annual output of 1 million units. The entire production will be exported at a selling price of USD 10 per unit. At the current rate of exchange dollar cost of local production equals to USD 6 per unit. Dollar is expected to decline by 10% or 15%. The change in local cost of production and probability from the expected current level will be as follows :

Decline in value of USD (%)	Reduction in local cost of production (USD/unit)	Probability
0	-	0.4
10	0.30	0.4
15	0.15 Additional reduction	0.2

The plant at the current rate of exchange will have a depreciation of USD 1 million annually. Assume local Tax rate as 30%.

You are required to find out:

i. Annual Cash Flow After Tax (CFAT) under all the different scenarios of exchange rate.

ii. Expected value of CFAT assuming no repatriation of profits.

iii. Viability of the investment proposal assuming an initial investment of USD 25 million on plant and working capital with a required rate of return of 11% on investment and on the basis of CFAT arrived under option (ii). The CFAT will grow @ 3% per annum in perpetuity.

Answer :

i.

percentage decline in USD	Selling price	Cost of production per unit	Quantity	EBDIT	Depreciation	EBIT	NOPAT	CFAT
1	2	3	4	5	6	7	8	9
				(1-2)× 3		(5-6)	7×(1-t)	(8+6)
0	10	6	1000000	4000000	1000000	3000000	2100000	3100000
10	9	5.7	1000000	3300000	1000000	2300000	1610000	2610000
15	8.5	5.55	1000000	2950000	1000000	1950000	1365000	2365000

ii.

Probability(P)	CFAT(X)	PX
0.4	3100000	1240000
0.4	2610000	1044000
0.2	2365000	473000
Total		**2757000**

Expected CFAT = 2757000

iii.

Expected CFAT in year 1 (C1)	2757000
Growth rate (Perpetual)	3%
Discount rate	11%
PV of the cash flows {C1/(i-g)}	34462500
Initial investment	25000000
Expected NPV	9462500

Since expected NPV is positive, project is viable.

Sanjay Sir's Comment:

The confusion in this sum is that exchange rate is not given. Students have to smartly think about how a representative and logical solution can be done.

A similar but advance sum done in class was page no. 106, problem no. 1

c. As a financial strategist you will depend on certain key financial decisions. Discuss

Answer :

The key decisions falling within the scope of financial strategy are as follows:

1. **Financing decisions**: These decisions deal with the mode of financing or mix of equity capital and debt capital.

2. **Investment decisions**: These decisions involve the profitable utilization of firm's funds especially in long-term projects (capital projects). Since the future benefits associated with such projects are not known with certainty, investment decisions necessarily involve risk. The projects are therefore evaluated in relation to their expected return and risk.

3. **Dividend decisions**: These decisions determine the division of earnings between payments to shareholders and reinvestment in the company.

4. **Portfolio decisions**: These decisions involve evaluation of investments based on their contribution to the aggregate performance of the entire corporation rather than on the isolated characteristics of the investments themselves.

Sanjay Sir's Comment:

This is direct theory question from ***CHAPTER 1 : FINANCIAL POLICY AND CORPORATE STRATEGY****.*

Question 2.

a. On 1st January, 2020, an open ended scheme of mutual fund had outstanding units of 300 lakhs with a NAV of ₹ 20.25. At the end of January 2020, it had issued 5 lakhs units at an opening NAV plus a load of 2%, adjusted for dividend equalization. At the end of February 2020, it had repurchased 2.5 lakhs units at an opening NAV less 2% exit load adjusted for dividend equalization. At the end of March 2020, it had distributed 70 per cent of its available income.

In respect of January - March quarter, the following additional information is available :

Value appreciation of the portfolio	₹ 460 lakhs
Income for January	₹ 24 lakhs
Income for February	₹ 36 lakhs
Income for March	₹ 47 lakhs

You are required to calculate :

i. Income available for distribution

ii. Issue price at the end of January

iii. Repurchase price, at the end of February

iv. Closing value of Net Assets at the end of March

Answer :

i.

₹ in lakhs

Particulars	No. of Units	Total Amount	₹ PV
O/S Units	300	-	-
Income Jan	-	24	-
End of Jan	300	24	0.08
Add : Issue of Units	5	0.4	0.08
Opening Balance	305	24.4	0.08
Add : Income		36	0.11803

	305	60.4	0.19803
Less : Repurchase units	(2.5)	(0.4951)	0.19803
Opening Balance	302.5	59.9049	0.19803
Add : Income		47	0.15537
Income available for distribution	302.5	106.9049	0.3534
Add : Distribution @ 70%		(74.83343)	(0.24738)
	302.5	32.07147	0.10602

Income available for distribution = ₹ 106.9049 lakhs

ii. Issue price at end of January

Opening NAV	= 20.25
Add : 2 % Entry load	= 0.405
Add : Dividend equalisation	= 0.08
	₹ 20.735

iii. Issue price at end of Feb.

Opening NAV	20.25
Less : 2% Exit load	(0.405)
Add Dividend	0.19803
	₹ 20.04303

iv. Closing value of NAV

$$= \frac{\text{Opening Units} \times \text{Opening NAV} + \text{All Income} + \text{Portfolio appereciation} - \text{Distribution} + \text{New Units Issued} - \text{Reprchased}}{\text{O/S units in the end}}$$

$$= \frac{\left((300 \times 20.25) + 24 + 36 + 47 + 460 - 74.83343 + 5 \times 20.735 - 2.5 \times 20.04303\right)}{302.5}$$

lakhs $= \frac{6620.734}{302.5} =$ ₹21.887

Sanjay Sir's Comment:

This is sum on dividend equalization reserve that had come in the past. There is less chance that people would have seen the sum and gone except those who are perfectionist and ensure that they do everything that has been done in class. So, if you would have done the sum at home you would be able to do it in exam otherwise there is risk involved.

Similar sum page no. 226, problem no. 24

b. X Ltd., an Indian company, is considering a proposal to make an investment of USD 1,65,00,000 in Latin America. The project will have a life of 5 years. The current spot exchange rate is INR/USD 72. All investments and revenues will occur in USD. The USD and INR risk free rates are 8% and 12% respectively. The following cash flow is expected form the project.

Year	Cash inflow (USD)
1	30,00,000
2	37,50,000
3	45,00,000
4	60,00,000
5	75,00,000

Assume required rate of return on the project as 14%.

You are required to calculate :

i. The viability of the project using foreign currency approach.

ii. What will be the impact if there is a withholding tax of 10% applicable on the project.

Answer :

i. Initial Investment = $ 1,65,00,000

Working Notes

1. **Calculation Risk Premium**

$$\text{Risk Premium} = \left(\left(\frac{1+i_{₹}}{1+R_{F₹}}\right)-1\right)\times 100$$

$$\left(\left(\frac{1.14}{1.12}\right)-1\right)\times 100 = 1.786\%$$

2. **Required Rate of return in $ term**

$$(1+R_F)(1+\text{Risk Premium})$$

$$= ((1.08)\ (1.01786)\ -1) \times 100 = 9.928\%$$

ii. Viability of Project

Year	Cash Inflow($)	PVAF @ 9.928%	PV($)
1	30,00,000	0.9097	27,29,100
2	37,50,000	0.8275	31,03,125
3	45,00,000	0.7528	33,87,600
4	60,00,000	0.6848	41,08,800
5	75,00,000	0.623	46,72,500
Total			1,80,01,125

NPV = PV of Cash Inflow - Initial Investment

= $ (1,80,01,125 - 1,65,00,000) = $ 15,01,125

NPV in ₹ terms = $ 15,01,125 × 72 = ₹ 10,80,81,000

Project is viable since NPV is greater than zero.

iii. The withholding tax will be charged on cash inflows.

So, after Tax Inflow = 1,80,01,125 × (1 - 0.1) = $ 1,62,01,012.5

NPV = $ (1,62,01,012.5 - 1,65,00,000) = - $ 2,98,987.5

NPV in ₹ terms = - ₹ 2,15,27,100

So, Project is not viable if these is a withholding tax of 10%

Sanjay Sir's Comment:

This is sum on international project appraisal - the typical sum that used to come - home currency approach and foreign currency approach. So, we had to do it by foreign currency approach and second part of the sum, they are saying that withholding tax 10%, so it is common sense that we have to reduce cash flows by 10% and then recalculate NPV. I think this was one of the easiest sum in the entire paper.

Similar sum page no. 7, problem no. 4.

c. "The process of securitization can be viewed as process of creation of additional financial product of securities in the market backed by collaterals." What are the other features ? Describe.

Answer :

The securitization has the following features:

i. **Creation of Financial Instruments** – The process of securities can be viewed as process of creation of additional financial product of securities in market backed by collaterals.

ii. **Bundling and Unbundling** – When all the assets are combined in one pool it is bundling and when these are broken into instruments of fixed denomination it is unbundling.

iii. **Tool of Risk Management** – In case of assets are securitized on non-recourse basis, then securitization process acts as risk management as the risk of default is shifted.

iv. **Structured Finance** – In the process of securitization, financial instruments are tailor structured to meet the risk return trade of profile of investor, and hence, these securitized instruments are considered as best examples of structured finance.

v. **Trenching** – Portfolio of different receivable or loan or asset are split into several parts based on risk and return they carry called 'Tranche'. Each Trench carries a different level of risk and return.

vi. **Homogeneity** – Under each tranche the securities issued are of homogenous nature and even meant for small investors who can afford to invest in small amounts.

Sanjay Sir's Comment:

*This is direct theory question from **CHAPTER 6 : SECURITIZATION**. It was also present in our SSEI mat page number 58.*

Question 3.

a. The price of March Nifty Futures Contract on a particular day was 9170. The minimum trading lot on Nifty Futures is 50. The initial margin is 8% and the maintenance margin is 6%. The index closed at the following levels on next five days :

Day	1	2	3	4	5
Settlement Price (₹)	9380	9520	9100	8960	9140

You are required to calculate :

i. Mark to market cash flows and daily closing balances on account of

   a. An investor who has taken a long position at 9170

   b. An investor who has taken a short position at 9170

ii. Net profit/ loss on each of the contracts

Answer :

i. Case I :

Investor takes long position @ 9170

Initial Margin = 8% × 9170 × 50 = ₹ 36,680

Maintenance margin = 6% × 9170 × 50 = ₹ 27510

Day	Price	MTM	Op. Bal.	Addition	Cl. Bal.
1	9,380	10,500	36,680	-	47,180,
2	9,520	7,000	47,180	-	54,180
3	9,100	(21,000)	54,180	-	33,180
4	8,960	(7,000)	33,180	10,500	36,680
5	9,140	9,000	36,680	-	45,680
Less : Refund					**(45,680)**
					0

Case II :

Investor takes short position @ 9170

Initial Margin = 8% × 9170 × 50 = ₹ 36,680

Maintenance margin = 6% × 9170 × 50 = ₹ 27510

Day	Price	MTM	Op. Bal.	Addition	Cl. Bal.
1	9,380	(10,500)	36,680	10,500	36,680
2	9,520	(7,000)	36,680	7,000	36,680
3	9,100	21,000	36,680	-	57,680
4	8,960	7,000	57,680	-	64,680
5	9,140	(9,000)	64,680	-	55,680
Less : Refund					**(55680)**
					0

ii. **Net Profit = (**9,140 - 9,170) × 50 = (1,500) (to long)
Net Profit = (9,170 - 9,140) × 50 = ₹ 1,500 (to short)

Sanjay Sir's Comment:

This is a sum on Margin maintenance and Mark to market feature of futures contract. Such a sum has come in past but when it came in the past, we were given μ and σ. So initial margin was calculated as μ + 3σ and maintenance margin was calculated as 75% of initial but in this sum, initial margin and maintenance margin is given as percentage of contract value. Rest everything is same. It is stupid on the part of CA institute to ask us to calculate profit/loss for the long position as well as the short position because we know that futures and options are a zero sum game - so, it will be equal in magnitude but opposite in sign.

Similar sum done in class page no. 25, problem no. 22

b. M/s. Sky products Ltd., of Mumbai, an exporter of sea foods has submitted a 60 days bill for EUR 5,00,000 drawn under an irrevocable Letter of Credit for negotiation. The company has desired to keep 50% of the bill amount under the Exchange Earners Foreign Currency Account (EEFC). The rates for ₹/USD and USD/EUR in inter-bank market are quoted as follows :

	₹/ USD	USD/EUR
Spot	67.8000 - 67.8100	1.0775 - 1.8000
1 month forward	10/11 Paise	0.20/0:25 Cents
2 months forward	21/22 Paise	0.40/0.45 Cents
3 months forward	32/33 Paise	0.70/0.75 Cents

Transit Period is 20 days. Interest on post shipment credit is 8% p.a. Exchange Margin is 0.1%. Assume 365 days in a year.

You are required to calculate :

i. Exchange rate quoted to the company

ii. Cash inflow to the company

iii. Interest amount to be paid to bank by the company.

Answer :

i. Sky product limited is an exporter, so it will receive Euro and it will sell that Euro to get dollars, so we required bid rate for calculation.

Spot Rate (₹/$)	67.80
Add : FR	0.21
FR(₹/$)	68.01
Spot rate ($/€)	1.0775
Add : Forward point	0.0040
	1.0815
(₹ / €) Forward Rate	68.01 × 1.0815(1 - 0.001)
	= ₹ 73.5528 × 0.999
	= ₹ 73.4793

(Since points given in cents)

ii. Cash Inflow to the company

$$=5,00,000\times\frac{1}{2}\times 73.4793=₹1,83,69,816$$

iii. Interest paid to bank by company

$$1,83,69,816\times 8\%\times\frac{80}{365}=₹3,22,101$$

Sanjay Sir's Comment:

This is a typical sum on cross rate ₹/$ is given $/€ is given we multiply to get ₹/€. The only problem is that there is transit period of 20 days given, so you have to find out the 60 days rate, the 80 day rate take whichever is lower because the exporter has to loose.

Similar sum done in class in page no. 37, problem no. 29

c. Following are the yields on Zero Coupon Bonds (ZCB) having a face value of ₹ 1,000:

Maturity (Years)	Yield to Maturity (YTM)
1	10%
2	11%
3	12%

Assume that the term structure of interest rate will remain the same.

You are required to

i. Calculate the implied one year forward rates

ii. Expected Yield to Maturity and prices of one year and two year Zero Coupon Bonds at the end of the first year.

Answer :

Calculation of implied one year forward rates

i. One year forward rate one year from now, i.e.,

$$f(1.2) = \left(\frac{(1.11)^2}{1.1} - 1\right) \times 100 = 12.009\%$$

One year forward rate two year from now i.e.,

$$f(2.3) = \left(\frac{(1.12)^3}{(1.11)^2} - 1\right) \times 100 = 14.027\%$$

ii. One year ZCB at the end of 1 year

Assuming price expectation theory (PET) holds good:

Expected ytm = f(1.2) = 12.009%

Price = ₹ 1000/1.12009 = ₹ 892.785

Two year ZCB at the end of 1 year

Assuming PET holds good

$$\text{Expected ytm} = f(1.3) = \left\{\left[\frac{(1.12)^3}{1.10}\right]^{\frac{1}{2}} - 1\right\} \times 100 = 13.0136\%$$

$$\text{Price} = \frac{₹1000}{(1.130136)^2} = ₹782.9858$$

Sanjay Sir's Comment:

This is a direct sum on Spot and Forward Rates in the bond valuation chapter.

Similar Sum page no. 159, problem no. 3

Question 4.

a. The following are the financial statements of A Ltd., and B Ltd. for the financial year ended 31st March, 2020. Both the companies are working in the same industry.

Balance Sheets (₹)

Particulars	A Ltd.	B Ltd.
Total Current Assets	15,00,000	12,00,000
Total Net Fixed Assets	12,00,000	6,00,000
Total Assets	27,00,000	18,00,000
Equity Capital (Face Value 10)	10,00,000	8,00,000
Retained Earnings	3,00,000	-
14% Long Term Debt	7,00,000	5,00,000
Total Current Liabilities	7,00,000	5,00,000
Total Liabilities	27,00,000	18,00,000

Income statement (₹)

Particulars	A Ltd.	B Ltd.
Net Sales	33,10,000	16,60,000
Gross Profit	6,90,000	3,40,000
Operating Expenses	2,00,000	1,00,000
Interest	98,000	70,000
EBT	3,92,000	1,70,000
Tax @ 30%	1,17,600	51,000
PAT	2,74,400	1,19,000
Additional information :		
Dividend Pay-out Ratio	40%	60%
Market Price per Share	40	15

You are required to calculate :

i. Earnings Per share (EPS), Profit Earning Ratio (PER), Return on Equity (ROE) and Book Value Per Share (BVPS) for both the firms.

ii. Estimate future EPS growth rate for both the firms.

iii. If on acquisition of B Ltd. by A Ltd., intrinsic value of B Ltd., will be ₹ 20 per share, develop range of justifiable Exchange Ratio (ER) that can be offered by A Ltd., to shareholders of B Ltd.

iv. Based on your analysis in (i) and (ii) whether the negotiated ratio will be close to upper or lower range. Justify.

v. Post-merger EPS on an ER of 0.4:1. What will be immediate accretion or dilution to EPS to the shareholders of both the firms ?

vi. Post-Merger MPS on the basis of ER of 0.4 : 1

Answer :

i.

		A Ltd.	B Ltd.
(PAT)	(A)	₹2,74,400	₹1,19,000
No. of shares	(B)	1,00,000	80,000
Equity Share R&S	(C)	₹13,00,000	₹8,00,000
MPS	(D)	₹40	₹15
EPS	(A/B) - E	₹ 2.744	₹1.4875
ROE	(A/C)	21.11%	14.875%
BVPS	(C/B)	₹13	₹10
P/E	(D/E)	14.577 times	10.084 times
Retention		60%	40%

ii. Growth Rate = Retention Ratio × ROE

A = 0.6 × 21.11 = 12.666%

B = 0.4 × 14.875 = 5.95%

iii. Max ER that A is ready to pay = 20/40 = 0.5:1
Min ER required by B = 15/40 = 0.375 : 1
Justifiable Range = 0.375-0.5 for per share of B

iv. The negotiated ratio will be close to lower range as in (i) and (ii) we can clearly see company is more dominating. So, company A will want to give as minimum consideration to B Ltd. as much they can.

v. $EPS_{A,B}$ of exchange ratio is 0.4 : 1

$$= \frac{2,74,400 + 1,19,000}{1,00,000 + 80,000 \times 0.4} = ₹2.98$$

	A	B
Post merger EPS	2.98	$2.98 \times 0.4 = 1.192$
Pre merger EPS	2.744	1.4875
Addition	0.236	(0.2955)

vi. MPS_{A+B} assuming P/E Ratio remains same as before merger

= EPSA+B × P/EA

= 2.98 × 14.577 = ₹ 43.44

Sanjay Sir's Comment:

This sum has been repeated in past SFM papers (both old syllabus and new syllabus) a large number of times. It has been done in class. It is one of the best sums - no ambiguity.

Similar sum page no.354, problem no. 48

b. Shyam buys 10,000 shares of X Ltd., @ ₹ 25 per share and obtains a complete hedge of shorting 400 Nifty at ₹ 1,100 each. He closes out his position at the closing price of the next day when the share of X Ltd., has fallen by 4% and Nifty Future has dropped by 2.5%.

What is the overall profit or loss from this set of transaction ?

Answer :

Profit/Loss on share

Particulars	Calculation	₹
Buy (A)	10,000 × 25	2,50,000
Sell (B)	10,000 × 25 × 0.96	2,40,000
Loss (B-A)		10,000

Profit/Loss on Nifty

Particulars	Calculation	₹
Buy (A)	400 × 1100	₹4,40,000
Sell (B)	400 × 1100 × 0.975	4,29,000
Profit (B-A)		11,000

Overall profit to Shyam = 11,000 - 10,000 = ₹ 1,000

Sanjay Sir's Comment:

It is a repeated sum from past papers. It is actually too easy. Pick up any Tom, Dick or Harry from the street who trades in stock market and he will give you the answer in a movement.

Similar sum done in class page no.56, problem no.46

c. Venture Capital Funding passes through various stages. Discuss.

Answer :

Stages of funding for VC

1. **Seed Money**: Low level financing needed to prove a new idea.
2. **Start-up**: Early stage firms that need funding for expenses associated with marketing and product development.
3. **First-Round**: Early sales and manufacturing funds.
4. **Second-Round**: Working capital for early stage companies that are selling product, but not yet turning in a profit.
5. **Third Round**: Also called Mezzanine financing, this is expansion money for a newly profitable company.
6. **Fourth-Round**: Also called bridge financing, it is intended to finance the "going public" process.

Risk in each stage is different. An indicative Risk matrix is given below:

Financial Stage	Period (Funds locked in years)	Risk Perception	Activity to be financed
Seed Money	7-10	Extreme	For supporting a concept or idea or R&D for product development and involves low level of financing.
Start Up	5-9	Very High	Initializing prototypes operations or developing products and its marketing.
First Stage	3-7	High	Started commercials production and marketing.
Second Stage	3-5	Sufficiently high	Expanding market and growing working capital need though not earning profit.

Third Stage	1-3	Medium	Market expansion, acquisition & product development for profit making company. Also called Mezzanine Financing.
Fourth Stage	1-3	Low	Facilitating public issue i.e. going public. Also called Bridge Financing.

Sanjay Sir's Comment:

*This is direct theory question from **CHAPTER 14 : STARTUP FINANCE**. It was also present in our SSEI mat page number 86.*

Question 5.

a. Ramesh has identified stocks of two companies A and B having good investment potential :

Following data is available for these stocks :

Year	A (Market Price per Share in ₹)	B (Market Price per Share in ₹)
2013	19.60	8.70
2014	18.75	12.80
2015	33.42	16.20
2016	42.64	18.25
2017	43.25	15.60
2018	44.60	13.25
2019	34.75	18.60

You are required to calculate :

i. The Risk and Return by investing in Stock A and B

ii. The Risk and Return by investing in a portfolio of these Stocks if he invests in Stock A and B in proportion of 6 : 4.

iii. The better opportunity for investment

Answer :

A	B	$Return_A$	$Return_B$	D_A	D_B	D_A^2	D_B^2	$D_A \times D_B$
19.60	8.70	-						
18.75	12.80	(4.34)	47.13	(18.33)	30.94	335.99	957.28	(567.13)
33.42	16.20	78.24	26.56	64.25	10.37	4128.06	107.54	666.27
42.64	18.25	27.59	12.65	13.60	(3.54)	184.96	12.53	(48.14)
43.25	15.60	1.43	(14.52)	(12.56)	(30.71)	157.75	943.10	385.72
44.60	13.25	3.12	(15.06)	(10.87)	(31.25)	118.16	976.56	339.69
34.75	18.60	(22.09)	40.38	(36.08)	24.19	1301.77	585.16	(872.78)
		83.95	**97.1425**			**6226.69**	**3582.175**	**(96.37)**

i. Average Return A = $\frac{83.95}{6} = 13.99\%$

Average Return B = $\frac{97.1425}{6} = 16.19\%$

Risk of A(σ) = $\sqrt{\frac{D_A^{\,2}}{n}} = \sqrt{\frac{6226.69}{6}} = 32.21\%$

Risk of B(σ) = $\sqrt{\frac{D_B^{\,2}}{n}} = \sqrt{\frac{3582.17}{6}} = 24.43\%$

ii. Return = Weighted average return

$W_A \times ARA + W_B \times ARB$

$= 0.6 \times 13.99 + 0.4 \times 16.19 = 14.87\%$

Working Note 1

Covariance (A,B) = $\frac{\sum dA \times dB}{n} = \frac{-96.37}{6} = -16.06(\%)^2$

$$\sigma_p = \sqrt{\sigma_A^2 (W_A)^2 + \sigma_B^2 (W_B)^2 + 2 \times r \times \sigma_A \times \sigma_B \times W_A \times W_B}$$

$$= \sqrt{\sigma_A^2 (W_A)^2 + \sigma_B^2 (W_B)^2 + 2 \times Cov(A,B) \times W_A \times W_B}$$

$$= \sqrt{(32.21)^2 (0.6)^2 + (24.43)^2 (0.4)^2 + 2 \times (-16.06) \times 0.6 \times 0.4}$$

$$= \sqrt{373.494 + 95.49 - 7.708}$$

$$= \sqrt{461.276}$$

Risk of Portfolio(σ_p) = 21.47%

iii. Coefficient of variation = $\frac{\sigma}{\text{Return}} \times 100$

CVA = $\frac{\sigma_A}{\text{Return}_A} \times 100 = \frac{32.21}{13.99} \times 100 = 230.24\%$

CVB = $\frac{\sigma_B}{\text{Return}_B} \times 100 = \frac{24.43}{16.19} \times 100 = 150.90\%$

CVP = $\frac{\sigma_p}{\text{Return Portfolio}} \times 100 = \frac{21.47}{14.87} \times 100 = 144.39\%$

So, the better investment opportunity is to invest in portfolio in ratio 3:2.

Sanjay Sir's Comment:

This question is based on simple statistics in which we have to calculate the Mean, Standard deviation, Correlation, Covariance. The problem in this sum is that instead of returns, prices are given, so it is time consuming. You have to convert prices into returns. Some people would calculate returns as change in price. That could be very very surprising - return is always percentage change in price, so doing this correctly means that your calculation speed and calculation efficiency is very high.

Similar sum in our mat page no. 56 problem no. 32

b. M/s. Roly Ltd. wants to acquire M/s. Poly Ltd. The following is the Balance Sheet of Poly Ltd. as on 31st March, 2020 :

Liabilities	₹	Assets	₹
Equity Capital (₹10 per share)	10,00,000	Cash	20,000
Retained Earnings	3,00,000	Debtors	50,000
12% Debentures	3,00,000	Inventories	2,00,000
Creditors and other liability	3,20,000	Plant & Machinery	16,50,000
Total	**19,20,000**	**Total**	**19,20,000**

Shareholders of Poly Ltd. will get one share of Roly Ltd. at current Market price of ₹ 20 for every two shares. External liabilities are expected to be settled at a discount of ₹ 20,000. Sundry debtors and Inventories are expected to realise ₹ 2,00,000.

Poly Ltd. will run as an independent unit. Cash Flow After Tax is expected to be ₹ 4,00,000 per annum for next 6 years. Assume the disposal value of the plant after 6 years will be ₹ 1,50,000. Poly Ltd. requires a return of 14%

n	1	2	3	4	5	6
PVIF(14%, n)	0.877	0.769	0.675	0.592	0.519	0.456

Advise the Board of Directors on the financial feasibility of the Proposal.

Answer :

Working Note 1 :

No. of share to be issued to Poly

$= 1,00,000 \times \frac{1}{2} = 50,000$

Working Note 2 :

Net Consideration Paid

$= 50,000 \times 20 =$ ₹ 10,00,000

Calculation of value derived from Plant and Machinery

Year	CF	PVAF @ 14%	PV
1	4,00,000	0.877	3,50,800
2	4,00,000	0.769	3,07,600
3	4,00,000	0.675	2,70,000
4	4,00,000	0.592	2,36,800
5	4,00,000	0.519	2,07,600
6	4,00,000	0.456	2,50,800
			15,55,200

PV of Terminal Value = 1,50,000 × PVIF(14%,6Y)

PV of Terminal Value = 1,50,000 × 0.456

PV of Terminal Value = 68,400

Total Value of Plant and machinery as of today = 15,55,200 + 68,400 = ₹ 16,23,600

PV of Plant and Machinery as on today (A)	16,23,600
12% Debentures (1)	3,00,000
Creditors and Other liability (2)	3,00,000
Less Debtors Realised (3)	(2,00,000)
Less Cash Received (4)	(20,000)
Cash Paid after settlement of liability and realization of assets(1+2-3-4)(B)	3,80,000
Consideration Paid in the form of Shares (C)	10,00,000
NPV(A-(B+C))	2,43,600

Since NPV is Positive for the said proposal, Therefore, M/s Roly should accept the proposal.

Sanjay Sir's Comment:

This is a repeated sum. It is focusing on the value of plant.

Similar sum done in class page no.318, problem no.30

c. Non-bank Financial Sources are becoming popular to finance start-ups. Discuss.

Answer :

Here are some of the sources for funding a startup:

i. **Personal financing**: It may not seem to be innovative but you may be surprised to note that most budding entrepreneurs never thought of saving any money to start a business. This is important because most of the investors will not put money into a deal if they see that you have not contributed any money from your personal sources.

ii. **Personal credit lines**: One qualifies for personal credit line based on one's personal credit efforts. Credit cards are a good example of this. However, banks are very cautious while granting personal credit lines. They provide this facility only when the business has enough cash flow to repay the line of credit.

iii. **Family and friends**: These are the people who generally believe in you, without even thinking that your idea works or not. However, the loan obligations to friends and relatives should always be in writing as a promissory note or otherwise.

iv. **Peer-to-peer lending**: In this process group of people come together and lend money to each other. Peer to peer lending has been there for many years. Many small and ethnic business groups having similar faith or interest generally support each other in their start up endeavors.

v. **Crowdfunding**: Crowdfunding is the use of small amounts of capital from a large number of individuals to finance a new business initiative. Crowdfunding makes use of the easy accessibility of vast networks of people through social media and crowdfunding websites to bring investors and entrepreneurs together.

vi. **Microloans**: Microloans are small loans that are given by individuals at a lower interest to a new business ventures. These loans can be issued by a single individual or aggregated across a number of individuals who each contribute a portion of the total amount.

vii. **Vendor financing**: Vendor financing is the form of financing in which a company lends money to one of its customers so that he can buy products from the company itself. Vendor financing also takes place when many manufacturers and distributors are convinced to defer payment until the goods are sold. This means extending the payment terms to a longer period for e.g. 30 days payment period can be extended to 45 days or 60 days. However, this depends on one's credit worthiness and payment of more money.

viii. **Purchase order financing**: The most common scaling problem faced by startups is the inability to find a large new order. The reason is that they don't have the necessary cash to produce and deliver the product. Purchase order financing companies often advance the required funds directly to the supplier. This allows the completion of transaction and profit flows up to the new business.

ix. **Factoring accounts receivables**: In this method, a facility is given to the seller who has sold the good on credit to fund his receivables till the amount is fully received. So, when the goods are sold on credit, and the credit period (i.e. the date upto which payment shall be made) is for example 6 months, factor will pay most of the sold amount up front and rest of the amount later. Therefore, in this way, a startup can meet his day to day expenses.

Sanjay Sir's Comment:

*This is direct theory question from **CHAPTER 14 : STARTUP FINANCE**. It was also present in our SSEI mat page number 71.*

Question 6.

a. The Balance Sheet of M/s. Sundry Ltd. as on 31-03-2020 is follows :

(₹ in lakhs)

Liabilities	₹	Assets	₹
Share Capital	300	Fixed Assets	600
Reserves	200	Inventory	500
Long Term Loan	400	Receivables	240
Short Term Loan	300	Cash	60
Payables & Provisions	200		
Total	1400	Total	1400

Sales for the year was ₹ 600 lakhs. The sales are expected to grow by 20% during the year. The profit margin and dividend pay-out ratio are expected to be 4% and 50% respectively.

The company further desires that during the current year Sales to Short Term Loan and Payables and Provision should be in the ratio of 4 : 3.

Ratio of fixed assets to Long Term Loans should be 1.5. Debt Equity Ratio should not exceed 1.5.

You are required to determine :

i. The amount of External Fund Requirement(EFR)

ii. The amount to be raised from Short Term, Long Term and Equity funds.

Answer :

The complete formula for external funds required (EFR) is expressed as:

$$EFR = A \times g - L \times g - m \times S_0 (1 + g)(1 - d)$$

A : Assets that change given a change in sales = 1400

L : Liabilities that change given a change in sales - these are obviously spontaneous current liabilities = 200

m : Profit Margin on Sales; i.e. net income / sales. = 4%

g : growth rate of sales = 20%

S_0 current sales = 600 Lakhs

d : dividend payout percent = 50%

(1 - d) Percent of earnings retained after paying out dividends; d is the dividend payout ratio.

EFR = $1400 \times 0.2 - 200 \times 0.2 - 0.04 \times 600 \times 1.2 \times (1- 0.5) = 225.6$

Note : If you do not want to do it by formula, lets do it intuitively-

Intuition

Thus the formula is trying to say that as sales grow, assets have to be funded. A portion of these funds will come spontaneously from current liabilities and retained earnings. The short fall is external funds required (EFR).

i. As per external fund requirement, it assumed that Asset and payable will grow at same rate as of sales.

Assets will grow by 20%

₹ 1,400 lakh × 20% = ₹ 280 lakhs.

It will be offset by

Growth of payable = ₹ 200 lakhs × 20% = ₹ 40 lakhs.

If sales growth is by 20%, we also assume profit to be increased by same amount and profit will ultimately effect R & S.

Sales = 600 × 1.2	7,20 lakhs
Profit @ 4%	2,88 lakhs
Less : Dividend Payout	(14.4) lakhs
Retained Earning	14.4 lakhs

External fund requirement = 280 - 40 - 14.4 = ₹ 225.6 lakhs

ii. Financing of Funds

Sales / Short term loan + Payable	=	4/3
720 / Short term loan + 240	=	4/3
2160 - 960	=	4 × Short term loan
Short term loan	=	300 lakhs

Since Short term Loan is already 300 lakhs, So no amount to be raised from Short term Loan.

Fixed Assets/Long Term Loan = 1.5 times

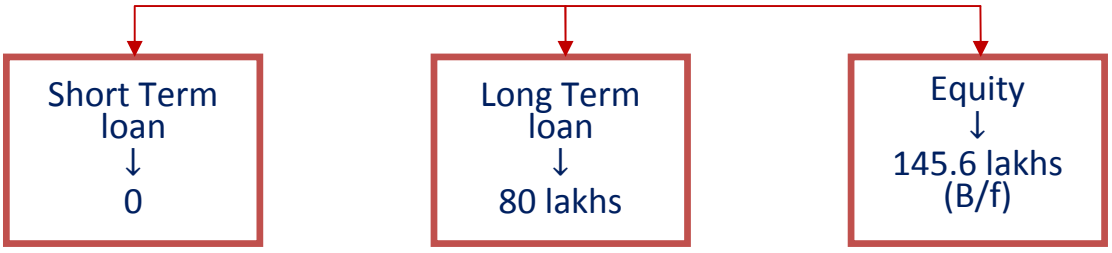
720/Long Term Loan = 1.5

Long Term Loan× 1.5 = 720

Long Term Loan = 480lakhs

Therefore, amount to be raised for Long Term Loan = (480 - 400) =₹ 80 lakhs

External Fund Requirement
= 225.6



So, equity = 300 + 200 + 145.6 = ₹ 645.6 lakhs

Debt = 480 + 300 = ₹ 780 lakhs

D/E = 780/645.6 = 1.208

So, debt to equity ratio is less than 1.5. We can accept this proposal.

Sanjay Sir's Comment:

I do not know if syllabus for SFM has changed since Nov 2019. From this term onwards, ICAI has been giving one sum on ratio analysis or so to say - general knowledge. Its like "Aaa dekhen zara, kisme kitna hai dum". So what should I say..... its like test of intrinsic immunity..... got to take vaccine I believe.

This sum was not done in class.

b. XYZ has taken a six-month loan from its foreign collaborator for USD 2 millions. Interest is payable on maturity @ LIBOR plus 1%. The following information is available :

Spot Rate	INR/USD	68.5275
6 months Forward rate	INR/USD	68.4575
6 months LIBOR for USD	2%	
6 months LIBOR for INR	6%	

You are required to :

i. Calculate Rupee requirements if forward cover is taken.

ii. Advise the company on the forward cover.

What will be your opinion if spot rate of INR/USD is 68.4275 ?

Answer :

i. If forward cover is taken

$ outflow after 6 months = $20,00,000\left(1+\left(0.03\times\frac{6}{12}\right)\right)=\$20,30,000$

Rupee requirement after 6 months = 20,30,000 × 68.4575 = ₹ 13,89,68,725

ii. The 6 m Libor for USD is 2% and 6m Libor for INR is 6%, so, according to IRP $ should be at premium (roughly 4%), but in the question 6 months forward USD is trading at discount. So it means right now forward rate is underpriced and company has rightly made the choice to choose forward cover.

iii. If later Spot rate turned out be 68.4275

Rupee requirement = 20,30,000 × 68.4275 = ₹ 13,89,67,825

So, if we had choose forward cover earlier and then rate turn out to be ₹ 68.4275 then XYZ Ltd. will face a loss of ₹

(68.4575 - 68.4275) × 20,30,000 = ₹60,900

Sanjay Sir's Comment:

This is common sensical sum on Foreign Exchange of course, it is not repeated from the past. However, student would have been able to do it.

Similar sum in our book page number 68, Problem no. 53

c. Participants are required for the success of the securitization process. Discuss their roles.

Answer :

Broadly, the participants in the process of securitization can be divided into two categories; one is Primary Participant and the other is Secondary Participant.

Primary Participants

Primary Participants are main parties to this process. The primary participants in the process of securitization are as follows:

a. Originator: It is the initiator of deal or can be termed as securitizer. It is an entity which sells the assets lying in its books and receives the funds generated through the sale of such assets. The originator transfers both legal as well as beneficial interest to the Special Purpose Vehicle (discussed later).

b. Special Purpose Vehicle: Also, called SPV is created for the purpose of executing the deal. Since issuer originator transfers all rights in assets to SPV, it holds the legal title of these assets. It is created especially for the purpose of securitization only and normally could be in form of a company, a firm, a society or a trust.

The main objective of creating SPV is to remove the asset from the Balance Sheet of Originator. Since, SPV makes an upfront payment to the originator, it holds the key position in the overall process of securitization. Further, it also issues the securities (called Asset Based Securities or Mortgage Based Securities) to the investors.

c. The Investors: Investors are the buyers of securitized papers which may be an individual, an institutional investor such as mutual funds, provident funds, insurance companies, mutual funds, Financial Institutions etc.

Since, they acquire a participating in the total pool of assets/receivable, they receive their money back in the form of interest and principal as per the terms agreed.

Secondary Participants

Besides the primary participants other parties involved into the securitization process are as follows:

a. **Obligors:** Actually they are the main source of the whole securitization process. They are the parties who owe money to the firm and are assets in the Balance Sheet of Originator. The amount due from the obligor is transferred to SPV and hence they form the basis of securitization process and their credit standing is of paramount importance in the whole process.

b. **Rating Agency:** Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available. Rating agency assesses the following:
   - Strength of the Cash Flow.
   - Mechanism to ensure timely payment of interest and principle repayment.
   - Credit quality of securities.
   - Liquidity support.
   - Strength of legal framework.

   Although rating agency is secondary to the process of securitization but it plays a vital role.

c. **Receiving and Paying agent (RPA)**: Also, called Servicer or Administrator, it collects the payment due from obligor(s) and passes it to SPV. It also follow up with defaulting borrower and if required initiate appropriate legal action against them. Generally, an originator or its affiliates acts as servicer.

d. **Agent or Trustee**: Trustees are appointed to oversee that all parties to the deal perform in the true spirit of terms of agreement. Normally, it takes care of interest of investors who acquires the securities.

e. **Credit Enhancer**: Since investors in securitized instruments are directly exposed to

   performance of the underlying and sometime may have limited or no recourse to the originator, they seek additional comfort in the form of credit enhancement. In other words, they require credit rating of issued securities which also empowers marketability of the securities.

Originator itself or a third party say a bank may provide this additional context called Credit Enhancer. While originator provides his comfort in the form of over collateralization or cash collateral, the third party provides it in form of letter of credit or surety bonds.

f. **Structurer**: It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal. It ensures that deal meets all legal, regulatory, accounting and tax laws requirements.

Sanjay Sir's Comment:

*This is direct theory question from **CHAPTER 6 : SECURITIZATION**. It was also present in our SSEI mat page number 60.*

OR

Risks are inherent and integral part of the market. Discuss.

Sanjay Sir's Comment:

*It is not clear as to whether ICAI will provide answer to this question from **CHAPTER 5 : PORTFOLIO MANAGEMENT** or from **CHAPTER 2 : RISK MANAGEMENT***