

FINAL EXAMINATION

June 2023

P-14(SFM)
Syllabus 2022

STRATEGIC FINANCIAL MANAGEMENT

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

All Sections are compulsory. Each section contains instructions regarding the number of questions to be answered within the section.

All Working notes must form part of the answer.

Wherever necessary, candidates may make appropriate assumptions and clearly state them in the respective answer.

No present value factor table or other statistical table will be given in addition to this question paper. Candidates may use the values tabulated at the relevant portions of this question paper.

Answer Question No. 1 and 8 are compulsory.

Answer any four from Question No. 2, 3, 4, 5, 6 and 7.

SECTION - A

Answer Question No. 1. All parts of this questions are compulsory.

- 1. Choose the correct alternative. Provide justification for your answer. 1 mark is allotted for the correct choice and 1 mark for the justification. (You may present only the Roman numeral, your choice and the justification without copying the questions.)**

2×10=20

- (i) ZOTSON Plc. has been evaluating investment in a project which will require ₹ 39 lakh capital expenditure on a new machinery. The company expects the capital investment to provide annual cash flows of ₹ 6 lakh per year after taxes indefinitely. The discount rate, which it applies to invest decisions of this nature, is 14 per cent net. What will be the Base Case NPV for ZOTSON Plc.'s project? (Calculation upto two decimal points.)
- (A) ₹ 4.00 lakh
(B) ₹ 3.86 lakh
(C) ₹ 3.56 lakh
(D) ₹ 3.25 lakh

- (ii) SBT company is considering four projects P, Q, R and T with the following information:

	Project A	Project B	Project C	Project D
Expected NPV (₹)	1,20,000	1,60,000	1,40,000	1,80,000
Standard Deviation (₹)	8,000	20,000	24,000	28,000

Identify the Least Risky Project if coefficient of variation is used:

- (A) Project P
 - (B) Project Q
 - (C) Project R
 - (D) Project T
- (iii) Which of the following is/are not the component of digital infrastructure and why?
- (A) APIs and Integrations
 - (B) Cloud Services
 - (C) Stablecoins
 - (D) Internet
- (iv) MR. PATOB, a Portfolio Manager managing a Portfolio (Beta 1.50) whose current market value of ₹ 12 crore. It is expected that the markets are likely to correct downwards and hedging needs to be adopted using NIFTY Index futures. Currently Index futures are quoted at 8000 with each contract underlies 100 units. Mr. PATOB hedges 100% of his Portfolios. What is the number of NIFTY Index contracts to be sold?
- (A) 180 contracts
 - (B) 200 contracts
 - (C) 225 contracts
 - (D) None of the above
- (v) MR. GORG is a forex dealer in India. Rates of Rupee and Euro in the International Market are US \$ 0.012572 and US \$ 1.117294 respectively. What will be his direct quote of € (Euro) to his customers? (Calculation upto 3 decimal points.)
- (A) ₹ 85.925
 - (B) ₹ 88.872
 - (C) ₹ 89.125
 - (D) ₹ 90.312

(vi) Plain Vanilla interest rate swaps involved

- (A) Fixed to Fixed rate Swap
- (B) Fixed to Floating rate Swap
- (C) Floating to Floating rate Swap
- (D) Currency Swap

(vii) An option's theoretical value increases by 1.75 if the interest rate is decreased by 1%. Then 1.75 is

- (A) the Rho of a call option.
- (B) the Rho of a put option.
- (C) the Theta of a call option.
- (D) the Theta of put option.

(viii) The intercept of the security market line (SML) on the Y-axis is

- (A) the risk free return.
- (B) the positive risk premium.
- (C) the Beta of the security.
- (D) the expected return when $\beta = 1$.

(ix) MS BRISTI is considering an investment in a Mutual Fund with a 2% load. As another alternative, she can also invest in a Bank Deposit paying 8% interest. Her investment planning period is 4 years. **Examine**, what should be the annual rate of return on Mutual Fund so that she prefers the investment in the Fund to the investment in Bank Deposit.

- (A) 8.15%
- (B) 8.55%
- (C) 8.82%
- (D) None of the above

(x) Which one of the following is not a part of Market Risk and why?

- (A) Equity Risk
- (B) Inflation Risk
- (C) Downgrade Risk
- (D) None of the above

SECTION - B

Answer *any four* from Question Nos. 2, 3, 4, 5, 6 and 7.

16×4

2. (a) SRISTI Ltd., a manufacturing company, has a machine Z which is ten years old and is badly in need of an overhaul. The overhaul will have the following costs:

₹

- (i) Motor and Generator 17,50,000
- (ii) Electronic equipments 5,00,000
- (iii) Painting and other parts 2,50,000

These expenses can be capitalised and depreciated for tax purposes over the next five years with no salvage value on a straight line basis. Post overhaul, the operating costs would be as follows in the first year:

	₹
Fuel	17,50,000
Labour and Benefits	15,00,000
Maintenance	7,50,000
Others	5,00,000

These costs increase at 5% p.a. with inflation.

Machine Z has zero book value with old parts (i) to (iii) but can be sold as it is for ₹2,00,000 and the difference between these values will be charged to tax at 25% which is also the corporate tax rate, expected to be valid for the next five years.

Installation of a brand new set of parts instead of overhaul of items (i) to (iii) above would mean a cost of ₹40,00,000 with depreciation similar to overhauling. This replacement will result in the following costs from the first year with annual increase of 5%:

	₹
Fuel	20,00,000
Labour and Benefits	12,00,000
Maintenance	5,00,000
Others	3,00,000

Overhauling or replacement will be done within a month and will not impact the annual production.

There is no scrap value expected after the end of five years, by when the production will stop whether parts are overhauled or replaced.

The cost of capital for evaluating such decisions at 10% p.a., cash flows and tax savings occur at year ends are considered.

Required:

Analyse the above information to **determine** the following:

- (i) Total Net Present Value (NPV) of the proposal for overhauling of the machine Z,
- (ii) Total Net Present Value (NPV) of the proposal for replacing new parts of Machine Z, and
- (iii) **Advise** the company as to which proposal (overhauling or replacing parts) will be preferable to the company with reasons.

(Present figure to the nearest Rupee)

[Given: PV factors @10%]

Year	1	2	3	4	5
PV (10%)	0.909	0.826	0.751	0.683	0.621

5+4+1=10

- (b) **Enumerate** what are the features of Securitization.

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3. (a) SOYAN Ltd. has an investment proposal, requiring an outlay of ₹ 1,60,000. The investment proposal is expected to have two years economic life with no salvage value. In year 1, there is a 0.4 probability that cash inflow after tax will be ₹ 1,00,000 and 0.6 probability that cash inflow after tax will be ₹ 1,20,000. The probabilities assigned to cash inflow after tax for the year 2 are as follows:

Cash inflow year-1	₹ 1,00,000		₹ 1,20,000	
Cash inflow year-2 with probabilities	₹ 48,000	0.2	₹ 80,000	0.4
	₹ 64,000	0.3	₹ 1,00,000	0.5
	₹ 88,000	0.5	₹ 1,20,000	0.1

The company uses a 10% discount rate for this type of investment.

Required:

- (i) **Represent** the SOYAN Ltd.'s proposed investment project as a Decision Tree.
- (ii) **Calculate** the expected Net Present Value (NPV) giving the break up of each path of the decision tree.
- (iii) **Calculate** the NPV that the project will yield, if the worst outcome is realised and analyse probability.

- (iv) **Analyse** the probability of having a negative NPV.
(v) **Suggest** as to whether the project should be accepted or not.
(Present figures to the nearest rupee)

Given: P.V. Factors at 10%.

Year	1	2	3
PV Factor	0.909	0.826	0.751

$$3+4+1+1+1=10$$

- (b) **Briefly discuss** the components of Digital Infrastructure.

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4. (a) SROIC Ltd., AAA rated company has issued, fully convertible bonds on the following terms, year ago:

Face value of Bond	₹ 1,000
Coupon (Interest Rate)	8.5%
Time to Maturity (remaining)	3 years
Interest Payment	Annual, at the end of year
Principal Repayment	At the end of bond maturity
Conversion ratio (Number of shares per bond)	25
Current market price per share	₹ 45
Market price of convertible bond	₹ 1,175

AAA rated company can issue plain vanilla bonds without conversion option at an interest rate of 9.5%.

Required:

Analyse the above data to calculate the following:

- (i) Straight Value of Bond
(ii) Conversion Value of the Bond
(iii) Conversion premium
(iv) Percentage of downside risk
(v) Conversion Parity Price

Given:

Year	1	2	3	4
PVIF 0.095, t	0.9132	0.8340	0.7617	0.6956

$$2+1+2+2+1=8$$

- (b) MS TONAM has invested in different point of time in three Mutual Funds (MFs). The following details pertaining to MFs are given:

Particulars	MF A	MF N	MF P
Amount of Investment (₹)	2,00,000	6,00,000	3,00,000
Net Assets Value (NAV) at the time of purchase (₹)	15.45	15.15	15
Dividend Received up to 31.03.2023 (₹)	10,000	0	8,000
NAV as on 31.03.2023 (₹)	15.38	15	15.30
Effective Yield per annum as on 31.03.2023 (percent)	9.60	- 11.60	24.15

Assume 1 year = 365 days

Based on the above parameters, you are required to **calculate** the following:

- Number of units in each scheme;
- Total NAV;
- Total Yield; and
- Number of days investment held.

2×4=8

5. (a) On the basis of the given information, MR. NAVIN wants to create a portfolio equally as risky as the market and is having ₹ 20,00,000 to invest:

Assets	Investment	Beta
Stock A	₹ 4,00,000	0.7
Stock B	₹ 5,00,000	1.10
Stock C	?	1.6
Debenture (D)	?	0

Required:

How do you **recommend** and **interpret** the risk scenario and investment in all the securities?

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- (b) Following is the information related to three mutual funds of BP company:

Year	MF-S	MF-T	MF-Z
1	10%	5%	14%
2	8%	10%	10%
3	12%	8%	18%

Correlation between market and mutual fund:

	MF-S	MF-T	MF-Z
Correlation with market	0.45	0.25	0.65

Variance of the market is 9% and rate of return of government bond is 7%.

You are **required** to

- Rank the Mutual Funds as per Sharpe's measure.
- Rank the Mutual Funds as per Treynor's measure.

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6. (a) Details about portfolio of shares of MR. RAJON, an investor is as below:

Shares	No. of shares (Lakh)	Price per share	Beta
A Ltd.	10	₹ 400	1.5
B Ltd.	6	₹ 500	1.2
C Ltd.	5	₹ 600	1.8

The investor thinks that the risk of the portfolio is very high and wants to reduce the portfolio beta to 1.125. He is considering two below-mentioned alternative strategies:

- Dispose off a part of his existing portfolio to acquire risk free securities or
- Take appropriate position on Nifty Futures which are currently traded at 5000 and each Nifty points is worth ₹ 500.

You are required to **determine**:

- Portfolio beta
- The value of risk free securities to be acquired
- Number of shares of each company to disposed off
- Number of Nifty contracts to be bought/sold
- Value of portfolio beta for 4% rise in Nifty

2+2+2+1+2=9

- (b) MR. ZETSON is interested in purchasing equity shares of ROTEX Ltd. which are currently selling at ₹ 600 each. He expects that price of share may go upto ₹ 780 or may go down to ₹ 480 in three months. The chances of occurring such variations are 60% and 40% respectively. A call option on the shares of ROTEX Ltd. can be exercised at the end of three months with a strike price of ₹ 630.

(Ignore transaction cost. Assume no dividends in the interim period.)

Required:

- Determine** the combination of the share and option should MR. ZETSON select if he wants a perfect hedge.

- (ii) **Explain** how MR. ZETSON will be available to maintain identical position regardless of the share price.
- (iii) **Calculate** the value of call option at the beginning of the period, if the risk-free rate of return is 10% p.a.
- (iv) **Calculate** the expected return on call option. $1+(2 \times 3)=7$

7. (a) NOTON Ltd. has imported goods to the extent of US\$ 1 crore. The payment terms are 60 days interest-free credit. For additional credit of 30 days, interest at the rate of 7.75% p.a. will be charged.

The banker of NOTON Ltd. has offered a 30 days loan at the rate of 9.5% p.a. Further their quote for the foreign exchange is as follows:

Spot rate INR/US\$	₹ 75.50
60 days forward rate INR/US\$	₹ 76.15
90 days forward rate INR/US\$	₹ 76.45

Required:

Advice which one of the following options would be better for NOTON Ltd.:

- (i) Pay the supplier on 60th day and avail bank loan for 30 days.
- (ii) Avail the supplier's offer of 90 days credit.

Note: Consider 360 days a year and calculation to be in crore rounding off upto 4 decimal points for INR and 5 decimal points for USD. $3+4+1=8$

- (b) SINJONS Ltd., an American company is under obligation to pay interests of Can\$ 10,10,000 and Can\$ 7,05,000 on 31st July and 30th September respectively. The company is risk averse and its policy is to hedge the risks involved in all foreign currency transactions. The Finance Manager of the company is thinking of hedging the risk considering two methods i.e. fixed forward or option contracts. It is now June 30. Following quotations regarding rates of exchange, US\$ per Can\$, from the company's bank were obtained:

Spot	1 Month Forward	3 Months Forward
0.9284–0.9288	0.9301	0.9356

Price for a Can \$ /US\$ option on a U.S. stock exchange (cents per Can \$, payable on purchase of the option, contract size Can \$ 50,000) are as follows:

Strike Price	Calls		Puts	
(US\$/Can\$)	July	Sept.	July	Sept.
0.93	1.56	2.56	0.88	1.75
0.94	1.02	NA	NA	NA
0.95	0.65	1.64	1.92	2.34

According to the suggestion of finance manager if options are to be used, one month option should be bought at a strike price of 94 cents and three month option at a strike price of 95 cents and for the remainder uncovered by the options, the firm would bear the risk itself. For this, it would use forward rate as the best estimate of spot. Transaction costs are ignored.

Required:

Recommend, which of the above two methods would be appropriate for the SINJONS Ltd. to hedge its foreign exchange risk on the two interest payments.

$$2+5+1=8$$

SECTION - C

Answer the following Questions.

8. MUNIT LTD. (ML) manufactures musical instruments. The Company exports around 60 per cent of its output. Customers are dispersed around the Country and there is no concentration in one particular area. MUNIT LTD.'s turnover has been growing at around 20 per cent per annum over the past 5 years and it now needs to consider extending its premises or moving to a new location. The present premises are rented from the Local Government Authority. The rental agreement is due for renewal on January 1, 2023. The Company Spent ₹ 20 Lakh on renovations to the property three years ago to provide a more suitable manufacturing environment for its products. The renovations are structural and could not be removed if MUNIT LTD. decides to relocate.

The company is considering three alternatives:

1. Renegotiate the rental agreement and extend the existing premises with the approval of the Land lords;
2. Buy a much larger property which is available a few kilometres from the current premises and which is around 20 years old; or

3. Build a new factory and office premises in an 'enterprise zone' approximately 150 kilometres away.

The information available on these three alternatives is as follows:

Alternative 1 : Rent and extend the existing Premises:

The rental terms would be ₹ 30 Lakhs per annum in real terms as at January 1, 2023. Rent will be payable at the end of each of the years 2023–2027. Rates are included with the rental payments. The agreement allows for an increase the annual payments in Line with inflation of 5 per cent per annum. Extensions to the premises would cost ₹ 57 Lakh (nominal) payable at the end of 2023. The extension costs can be written off, for tax purposes, in the year in which they are incurred. The local Authority (the Land Lord) has indicated it would be willing to purchase the extension from MUNIT Ltd.. (ML) at the original nominal Cost at the end of 2027.

Alternative 2 : Buy Larger Property:

The purchase costs are ₹ 150 Lakh payable on January 1, 2023. Rates will be fixed at ₹ 15 Lakh per annum payable at the end of each year from 2023 to 2032 inclusive. Renovations and Removal costs payable at the end of the first year (2023) are estimated at ₹ 45 Lakh nominal.

The Company thinks these premises will be large enough until the end of 2032. After that, it may have to sell or move again, as there is no possibility of extending these premises. Depreciation for tax purposes are available on the full purchase cost of new premises at 4 percent straight line. The realizable value of the premises at the end of 10 years is estimated as ₹ 300 Lakh nominal.

Note : Assume the application of indexation allowance at the time of sale will **result** in there being no balancing charge or balancing allowance.

Alternative 3 : Build new Factory and Office Premises:

The land will Cost ₹ 60 Lakh which will be paid at January 1, 2023. Building Costs are estimated at ₹ 75 Lakh to be paid at the end of 2023. While building is in Progress, the Company will remain in its existing premises at an agreed annual rent of ₹ 30 Lakh payable at January 1, 2023. No Rates will be payable on the new premises for the years 2023 to 2025 inclusive. From 2026 onwards they are expected to be ₹ 9 Lakh per annum payable at the end of each year. The company estimates that 50% of the work force will relocate. Removal and relocation costs at the end of 2023 will be ₹ 15 Lakh. Recruitment and Training Costs of the new staff are estimated as ₹ 21 Lakh, also payable at the end of 2023. All costs in this alternative are in nominal terms. The cost of the buildings being in an enterprise zone, will attract 100 per cent first year depreciation.

For the purposes of evaluation, a 15 year life of the Land and buildings from the Commencement of the evaluation under this alternatives.

Additional Information :

1. The starting date for the evaluation is January 1, 2023
2. The Company pays tax at 33 per cent. This rate is not expected to change.
3. Tax relief is available on 100 per cent of all expenses and Costs except Land in alternative-3, and building in alternative-2, which attract depreciation as indicated.
4. The Company is quoted on the National Stock Exchange (NSE) and which has a Debt : Equity Ratio of 1 : 3. The Cost of Debt before Tax is 10% and the cost of Equity of 15.10%.

Note: (Inflation Index figures are to rounded off to 3 decimal places. Show calculation in ₹ Lakh upto 2 decimal places and use PV factors upto 3 decimal places).

Required:

- (i) **Evaluate** the Total Net-Present value of Cash Out Flows of Alternative-1 (Rent and extend the existing Premises)
- (ii) **Assess** the value of Equivalent Annual Cost of Alternative-2 (Buy larger property locally)
- (iii) **Present** the Total Net present value (outflows) of Alternative-3 (Build new factory and office Premises)
- (iv) Which alternative (Project) would you **recommend** for acceptance of the Company (ML) and why?

Given:

PV Factor Table								Annuity Factor Table		
Yr. end Rate	1	2	3	4	5	10	15	5	10	15
12%	0.893	0.797	0.712	0.636	0.567	0.322	0.183	3.605	5.650	6.811
13%	0.885	0.783	0.693	0.613	0.543	0.295	0.160	3.517	5.426	6.462
14%	0.877	0.769	0.675	0.592	0.519	0.270	0.140	3.433	5.216	6.142

$$4+4+6+2=16$$

SUGGESTED ANSWERS TO QUESTIONS

SECTION-A

1.

- (i) (B)
- (ii) (A)
- (iii) (C)
- (iv) (C)
- (v) (B)
- (vi) (B)
- (vii) (B)
- (viii) (A)
- (ix) (B)
- (x) (C)

SECTION-B

2 (a)

- (i) Total Net Present Value (NPV) of the proposal for overhauling of the machine Z = ₹ -16031705
- (ii) Total Net Present Value (NPV) of the proposal for replacing new parts of Machine Z = ₹ -15554944
- (iii) Advice: Since net present value of cash out flow of replacing parts for machine is lower than the net present value of cash outflow of overhauling machine z, it is better to replace the parts of Machine Z resulting in decline of outflow by Rs. 476761.

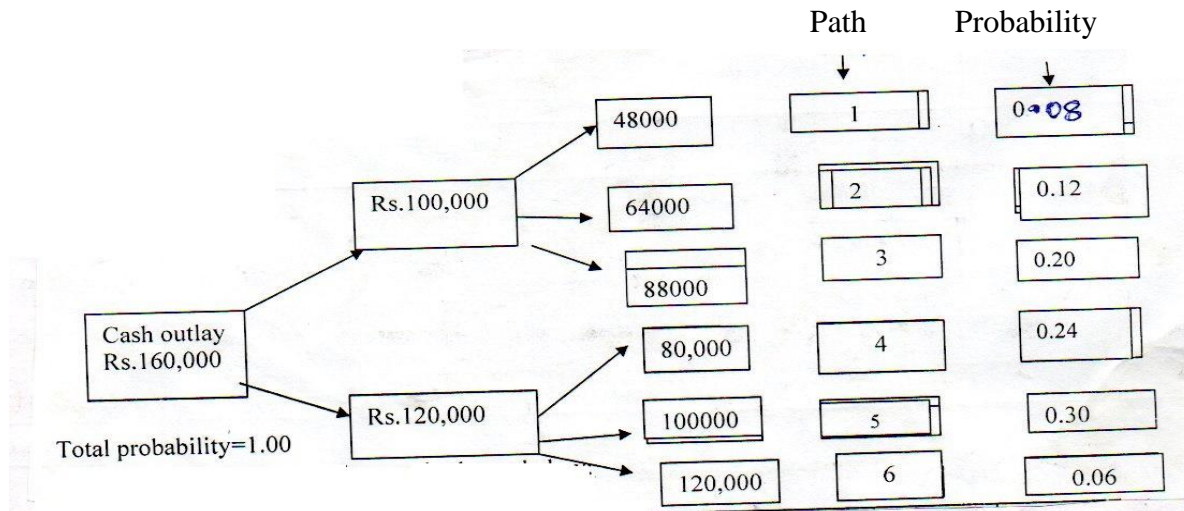
2 (b)

The features of Securitization are enumerated below:

- (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 on-resource 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.

3 (a)

(i)



Decision Tree

(ii) Expected NPV

Path	Expected NPV
1	(2,356.16)
2	(1,948.32)
3	717.60
4	3,638.40
5	9,504.00
6	2,892.00
	12,447.52

- (iii) If the worst outcome is realized the NPV which the project will yield is Rs.29452 (negative). The probability of occurrence of this NPV is 8%.
- (iv) Probability of negative NPV: = 0.20 i.e. 20%
- (v) Suggestion: Since the total expected net present value (ENPV) is positive of Rs. 12447.52 based on joint probability, the company is suggested to accept the project.

3 (b)

Components of digital infrastructure include the following: (Any six)

(1) Internet

The internet connects vast range of information resources and services, acts a prime enabler or connecting force that integrates the digital world including digital finance.

(2) Mobile telecom and digital communication suites, including applications

These connect various organizations to a common network and enables communication for digital transaction.

(3) Data centres and networks

It is a physical facility that organizations use to house their critical applications and data.

(4) Enterprise portals, platforms, systems and software

It is a framework for integration information, people and processes across organization boundaries, provides secure and unified access point.

(5) Cloud Services

These are designed to easy and affordable access to application and resources and without the need for internal infrastructure or hardware.

(6) Operational security, user identity and data encryption

It is a security and risk management process that prevents sensitive information from getting into wrong hands

(7) APIs and integrations

An application programming interface (API) is a messenger that processes request and ensures seamless functioning of enterprise systems.

4 (a)

- | | |
|-------------------------------------|------------|
| (i) Straight Value of Bond = | Rs. 974.96 |
| (ii) Conversion Value of the Bond = | Rs. 1125 |
| (iii) Conversion premium = | Rs.2 |
| (iv) Percentage of downside risk = | 20.52% |
| (v) Conversion Parity Price = | Rs. 47 |

4 (b)

(i) Number of Units in each Scheme

MF-A	=12944.98
MF-N	=39603.96
MF-P	=20000.00

(ii) Total NAV on 31.03.2023 = Rs.1099153.19

(iii) Total yield; = Rs.17153.19

Total Yield = 1.5594%

(iv) No. of days investment held:

MF-A = 173 days

MF-N = 31 days

MF-P = 71 days

5 (a)

Amount to be invested in Stock (C) is Rs. 7,31,200 and in Debenture is Rs. 3,68,800.

5 (b)

(i) Rank the Mutual Funds as per Sharpe's measure.

Mutual Fund	R_p	R_r	$R_p - R_r$	σ_p	Reward to Variability	Ranking
MF-S	10.00	7.00	3.00	1.63	1.84	2
MF-T	7.67	7.00	0.67	2.05	0.33	3
MF-Z	14.00	7.00	7.00	3.27	2.14	1

(ii) Rank the Mutual Funds as per Treynor's measure.

Mutual Fund	R_p	R_t	$R_p - R_t$	β_p	Reward to Volatility	Ranking
MF-S	10.00	7.00	3.00	0.244	12.30	1
MF-T	7.67	7.00	0.67	0.171	3.92	3
MF-Z	14.00	7.00	7.00	0.709	9.87	2

6 (a)

(i) Portfolio Beta = 1.5

(ii) The value of risk free securities to be acquired. = ₹ 2500 lakh

(iii) Number of Shares of each company to be disposed off.

Shares	No. of Shares (lakhs)
A Ltd.	2.50
B Ltd.	1.50
C Ltd.	1.25

(iv) Number of Nifty Contracts to be sold = 150 contracts

(v) Value of portfolio beta for 4% rise in Nifty = 1.125

6 (b)

(i) Mr. ZETSON should purchase 0.5 share for every 1 call option.

(ii) If price of share comes out to be ₹780 then value of purchased share will be:

Sale Proceeds of Investment (0.50 x ₹780)	₹390
Loss on account of Short Position (₹780 – ₹630)	₹150
	₹240

If price of share comes out be ₹480 then value of purchased share will be:

Sale Proceeds of Investment (0.50 x ₹480)	₹240
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(iii) Value of call option at the beginning of the period. = Rs. 65.85

(iv) Expected Return on the Option: = 36.67%

7 (a)

(i) Total Outflow under Option-1 = Rs. 76.7529 Crore

(ii) Total Outflow under Option-2 = Rs. 76.9439 Crore

Advice: Since cash outflow is least under option-1, it is better to avail loan from bank.

7 (b)

Forward Market Cover

Hedge the risk by buying Can\$ in 1 and 3 months time will be:

July= US \$ 939401

Sept.= US \$ 659598

Option Contracts:

July Payments = 20.20

Sept. Payments = 14.10

Company would like to take out 20 contracts for July and 14 contracts for September respectively. Therefore costs, if the options were exercised, will be:

	July		September	
	Can\$	US\$	Can\$	US\$
Covered by Contracts	1000000	940000	700000	665000
Balance bought at spot rate	10000	9301	5000	4678
Option Costs:		10200		11480
		<hr/>		<hr/>
Total cost in US\$ of using Option Contract		959501		681158

Decision: As the firm is stated as risk averse and the money due to be paid is certain, a fixed forward contract, being the cheapest alternative in both the cases, would be recommended.

SECTION –C**8**

Equivalent Annual Costs (EAC):

(i) Alternative-1 = Rs. 26.76 lakh

(ii) Alternative-2 = Rs. 24.32 lakh

(iii) Alternative-3 = Rs. 26.58 lakh

(iv) Alternative-2: (Buy larger property, locally) may be recommended for acceptance to the company, since this alternative-2 looks most attractive which show the lowest equivalent annual cost (Rs. 24.32 lakh) as stated supra.