FINAL EXAMINATION

June 2023

P–14(SFM)

Syllabus 2016

STRATEGIC FINANCIAL MANAGEMENT

Time Allowed: 3 Hours | Full Marks: 100

The figures in the margin on the right side indicate full marks.
All workings must from Part of your answers.
Wherever necessary, suitable assumptions may be made and clearly stated in the answer.
No present value or other statistical table will be provided in additional to this question paper.
Candidates may use the values tabulated at the relevant portion of this question paper for computation of answers where required.
This paper contains two sections, A and B. Section A is compulsory and contains questions 1 of 20 marks.
Section B contains questions 2 to 8, each carrying 16 marks.
Answer any five questions from Section B.

SECTION–A

Answer all the questions. Each question carries two marks.

1. Choose the correct option from the four alternatives given (1 mark is for the correct choice and 1 mark for justification/workings. (You may present only the Roman numeral, your choice and the reason/workings, without copying the question). 2×10=20

(i) A project of **Axon Ltd.** requires ₹ 30 lakh capital investment and expects perpetual annual cash inflow after taxes of ₹ 8 lakh. The business risk of the venture requires a 20 per cent discount rate. However, as the project is considered socially desirable it qualifies for an immediate tax-free Government grant of ₹ 10 lakh. What will be the Adjusted Net Present Value (ANPV) of the project?

(A) ₹ 25 lakh
(B) ₹ 20 lakh
(C) ₹ 15 lakh
(D) Insufficient information

(ii) An instrument of debt having investment grade rating by a credit rating agency

(A) implies that the investment is safe and recommends that the investor can go ahead and invest in the security.
(B) implies that all statutory compliances of the issuing entity are fulfilled.
(C) implies that the investment is sound at the time of issue and the issue price is reasonable.
(D) implies an opinion of the rating agency that the instrument will pay back the capital and the stated interest on time.

(iii) **Mr. Shan** a trader, is having in its portfolio shares worth ₹ 85 lakh at current price and cash ₹ 15 lakh. The beta of share portfolio is 1.6. After 3 months the price of shares dropped by 3.20%. If the trader on current date goes for long position on ₹ 100 lakh Nifty Future, what is the value of Market Index after 3 months?

(A) ₹ 95 lakh
(B) ₹ 96 lakh
(C) ₹ 98 lakh
(D) None of the above

(iv) **SMO Mutual Fund** has a NAV of ₹ 8.60 at the beginning of the year. Meanwhile Fund distributes ₹ 0.80 as dividend and ₹ 0.70 as capital gains. If the Fund's return during the year is 26.16%, at the end of year NAV will increase to_____.

(A) ₹ 9.10
(B) ₹ 9.35
(C) ₹ 9.40
(D) None of the above

(v) The Sharpe's ratio and the Treynor's ratio of **Reliance Growth Fund** are 0.56 and 9.80, respectively. The correlation co-efficient between returns of the Fund and the Market-Index is 0.70. What is the standard deviation of the market index's return ?

(A) 12.25%
(B) 11.14%
(C) 10.62%
(D) Insufficient parameter

(vi) The current market price of an equity share of BANCH Ltd. is ₹ 400 and it is expected that the stock price after 3 months will be either ₹ 432 or ₹ 360. If the Risk free rate of interest be 12% p.a., what should the value of a '3 month's' Call Option under the 'Risk-neutral' method at the strike rate of ₹ 388?
[Given, $e^{0.02} = 1.0202$, $e^{0.03} = 1.03045$]

(A) ₹ 30.94
(B) ₹ 32.15
(C) ₹ 32.98
(D) None of the above

(vii) While plotting a graph with risk on X-axis and expected return on Y-axis, a line drawn with co-ordinates (o, rf) and (β, r m) is called

(A) Security Market Line

(B) Characteristic Line

(C) Capital Market Line

(D) CAPM Line

(viii) The project-Z of ZINT Ltd. has a mean NPV of ₹ 600. The Project Manager of the Company wants to determine the probability of the NPV of the project under different ranges. If the Standard Deviation of NPV is ₹ 300, what is the probability of the NPV between the range of ₹ 375 and ₹ 675?

[**Given**: Area under Normal Curve from O to Z]:

Z = O to Z	0.15	0.25	0.50	0.60	0.75	1.25	1.30
Value	0.05962	0.09871	0.19146	0.22575	0.27337	0.39435	0.40320

(A) 27.34%

(B) 37.21%

(C) 40.13%

(D) 44.04%

(ix) The following various currency quotes are available:

₹/£ 104.0215 / 104.5505

£/$ 0.7155/0.7195

$/100 ¥ 0.8695/0.8710

The rate at which 100 ¥ can be purchased with Rupees will be _____.

(A) ₹ 67.37

(B) ₹ 66.50

(C) ₹ 65.52

(D) None of the above

(x) If the Reserve Bank of India (RBI) intends to reduce the supply of money to bring down inflation, it might

(A) increase the Cash Reserve Ratio (CRR).

(B) decrease the Statutory Liquidity Ratio (SLR).

(C) buy Government securities in the open market.

(D) lower the Bank rate.

SECTION–B

Answer *any five* questions.
Each question carries 16 marks.

2. MEDCO HOSPITAL proposes to install a DNA Testing equipment that would cost ₹ 100 lakh. The Management of Hospital wants to analyse whether to purchase the equipment from a bank loan or to lease it from the leasing company and General Manager (Finance) of the Hospital is presented with the following alternatives for execution of the same:

Proposal-1: Purchase the equipment at a cost of ₹ 100 lakh. The life of the equipment is estimated at 5 years with residual value of ₹ 10 lakh and the cost net of residual value is depreciated equally each year over its life which is allowed for income tax purpose. Annual Maintenance Charges excluding depreciation are estimated at ₹ 4 lakh payable at the end of each year. The purchase could either be funded through a bank loan at 10% repayable in 5 equal annual installments at the end of the year.

OR

Proposal-2: HAL LTD. had submitted a proposal to MEDCO Hospital to provide the equipment on lease at year end rental of ₹ 16 lakh for 5 years with a clause to increase the rentals by ₹ 2 lakh on annual basis. The cost of equipment is ₹ 100 lakh, which would be depreciated over a period of 5 years with residual value of ₹ 10 lakh.

Medco Hospital's Income Tax rate is 40% and after tax weighted average cost of Capital is 12% p.a.

The Lessor HAL Ltd. is an Investor Company that specializes in the leasing of various Medical equipments across the country. Hal Ltd. would buy the Medical equipments from its own funds, maintain the equipment incurring ₹ 2 lakh p.a. (year end). HAL Ltd. is confident of reworking the testing equipment at the end of 5 years at no extra cost and finding a rural hospital which would pay ₹ 26 lakh for it at the end of the 5th year. HAL LTD. (Lessor) is also a profit making company with a 40% corporate tax rate and 20% tax rate on long term capital gains. Its after tax weighted average cost of capital is 12% p.a.

Required:

(a) (i) For MEDICO HOSPITAL, present the statements of Discounted Cash Flows under the proposals of buying equipment with borrowed funds and leasing using appropriate discount rate.

(ii) Suggest the best alternative to the Management of Medco Hospital.

(b) Evaluate the viability of the proposal for HAL LTD. (Lessor). Comment on the situation.

[Present the amount of installments, Cash flows etc. in ₹ Lakh, upto four decimal places]

[You may use present value "+" for inflows and " – " or '( )' for outflows.]

PV Factor table (PVIF)						Annuity Factors (PVIFA)
Year	1	2	3	4	5	5
PV@6%	0.943	0.890	0.840	0.792	0.747	4.212
PVC@12%	0.893	0.797	0.712	0.636	0.567	3.605
PV@10%	0.909	0.826	0.751	0.683	0.621	3.791

9+7=16

3. (a) An analyst of SHCL Research Division has made the returns on Mutual Fund BS and Market Portfolio for the period of six months which are given as follows:

Month 2022	Return on Mutual Fund- BS (%)	Return on Market Portfolio (%)
July	–2	2
August	3.5	3
September	–1.6	0
October	2.5	4
November	2.1	–3.3
December	4.5	3

The 6 months Treasury Bills carry an interest rate of 9% p.a. and covariance between fund-BS and Market Portfolio (COV_{FM}) is 1.67.

Required:

(i) Calculate Average Returns (AR) and Risk of Losses (RL) of Mutual Fund-BS and Market Portfolio.

(ii) Determine the Morning Star Index (MSI) of Mutual Fund-BS and Market Portfolio.

(iii) Compute the Treynor's Ratio of Mutual Fund-BS.

(Present calculation upto four decimal points) 4+2+2

(b) An investor, **Mr. Kanchinadham** is evaluating the prospects of investing in two stocks viz. Spark Ltd. and Ebect Ltd. He has estimated the conditional returns from the stocks of these two companies along with their probabilities as are given below:

Probability	Conditional Returns	
	Spark Ltd.	Ebect Ltd.
20%	90%	11%
10%	75%	29%
30%	60%	33%
25%	20%	60%
15%	30%	55%

***Required*:**

(i) Determine the expected returns and standard deviations of returns for both the stocks of Spark Ltd. and Ebect Ltd.

(ii) If the correlation co-efficient between the stocks of Spark Ltd. and Ebect Ltd. is –1, what will be the expected rate of return of a zero-risk portfolio consisting of the said stocks?

[Present calculation upto two decimal places] 4+4

4. (a) IXOTICA LTD. (IL) a Indian MNC is executing a Plant in Bangladesh. It has raised ₹ 4000 million. Half of the amount will be required after six months time. Ixotica Ltd. is looking an opportunity to invest this amount on 1st April 2022 for a period of six months. It is considering two underlying proposals.

Market	Japan	US
Nature of Investment	Index Fund (JPY)	Treasury Bills (USD)
Dividend (in Millions)	270	-
Income from stock Lending (in millions)	177.4693	-
Discount on Initial Investment at the end	2%	-
Interest	-	6% per annum
Exchange Rate (1st April 2022)	JPY/INR 2.58	USD/INR 0.0131
Exchange Rate (30th September 2022)	JPY/INR 2.57	USD/INR 0.0126

You as an Investment Manager, are required to suggest the best course of option to be considered to the Ixotica Ltd. 8

(b) **Trinath**, a Rice Trader has planned to sell 25000 kgs of Rice after 3 months from now. The spot price of the Rice is ₹ 65 per kg and 3 months future on the same is trading at ₹ 64 per kg. Size of the contract is 1000 kgs. The price is expected to fall as low as ₹ 61 per kg, 3 months hence.

Required:

(i) What the trader can do to mitigate its risk of reduce profit?

(ii) Compute number of future contracts to be traded.

(iii) If he decides to make use of future market, what would be the effective realized price for its sale, when after 3 months spot price is ₹ 62 per kg and future contract price for 3 months is ₹ 63 per kg?
Calculate gain or loss on future position.

(iv) Calculate the effective selling price. 2×4

5. (a) Ms. PRESTEELA, a portfolio Manager owns a portfolio with the following characteristics:

Particulars	Security M	Security N	Risk Free Security
Factor-1: Sensitivity	0.80	1.50	0
Factor-2: Sensitivity	0.60	1.20	0
Expected Return	15%	20%	10%

It is assumed that Security returns are generated by a two factor model.

Required:

(i) If Ms. Presteela has ₹ 2,00,000 to invest and sells short ₹ 1,00,000 of Security N and purchases ₹ 3,00,000 of Security M, what is the Sensitivity of Ms. Presteela's portfolio to the two factors?

(ii) If Ms. Presteela borrows ₹ 2,00,000 at the Risk Free rate and invests the amount she borrows along with the original amount of ₹ 2,00,000 in Security M and Security N in the same proportion as described in Part (i), what is the sensitivity of the portfolio to the two factors?

(iii) What is the expected Return premium of Factor-2? 3+3+2

(b) On 1st October, an open ended scheme of a mutual fund had 300 lakh units outstanding with Net Assets Value (NAV) of ₹ 22.50. At the end of October, it issued 6 Lakh units at opening NAV plus 2% load, adjusted for dividend equalization. At the end of November 3 lakhs units were repurchased at opening NAV less 2% exit load adjusted for dividend equalization. At the end of December 70% of its available income was distributed.

In respect of October-December quarter, the following additional information are available.

	₹ In lakh
Portfolio value appreciation	510.56
Income of October	27.54
Income for November	41.31
Income for December	54.54

You are required to calculate—

(i) Income available for distribution
(ii) Issue price at the end of October
(iii) Repurchase price at the end of November and
(iv) Net asset value (NAV) as on 31st December

(Present calculation upto 4 decimal points) 3+1+1+3

6. (a) The shares of ZOM Ltd. are presently trading at a price of ₹ 360. After 3 months, the prices will either be ₹ 378 or ₹ 342 with respective probabilities 60% and 40%. There is a call option on the shares of ZOM Ltd. that can be exercised only at the end of three months at an exercise price of ₹ 355.50. The Risk –Free Rate of interest is 6% per annum continuous compounding.

Assume no dividends in the interim period.

Required:

(i) Find the value of three months call option using the Binomial Model (Delta Method)
(ii) Compute the value of the put-option under put-call parity.
(iii) What are the expected values of the option and the stock price at the end of three months?

[**Given**: $e^{-0.015} = 0.985112$, $e^{-0.03} = 0.970446$, $e^{0.015} = 1.015113$, $e^{0.03} = 1.030455$]

(Calculation upto two decimal points) 4+2+2

(b) The returns on stock P and Market portfolio–M for a period of four years in excess of the risk free rate of 6% are given as under:

Year	Return of Stock–P (%)	Return on Market Portfolio (%) (M)
1	12	8
2	10	10
3	9	9
4	3	–1

Additional details that may be used optionally.

Variance $(\%)^2$	19.25	11.25
Covariance $(\%)^2$	13.25	

Required:

(i) Ascertain the equation for the characteristic line of Stock-P.

(ii) What will be the return on Stock-P if the Market Return is 13.50%?

(iii) Comment on the Correlation co-efficient.

(Calculation upto three decimal points) 4+2+2

7. (a) ROXY PROJECT LTD. (RPL), a company is trying to decide whether to invest in a new project. Two mutually exclusive projects are available, each requiring an investment of ₹ 3,00,000. Project A is expected to generate cash inflows of ₹ 2,00,000 per year in the next 2 years. It is estimated that the cash inflows associated with project B would either be ₹ 1,80,000 or ₹ 2,20,000 (each with 0.5 probability of occurrence) next year. If ₹ 1,80,000 is received in the first year, the cash inflow for the second year is likely to be ₹ 1,50,000 (probability of 0.3) ₹ 1,80,000 (probability of 0.4) and ₹ 2,00,000 (probability of 0.3). In case the first year's cash inflow is ₹ 2,20,000, the second year's likely cash inflow would be ₹ 1,80,000 and ₹ 2,70,000 (each with 0.3 probability), and ₹ 2,20,000 (probability 0.4).

The firm uses a 14 percent minimum required rate of return for deciding whether to invest in projects comparable in risk to the ones under consideration. (ignore all taxations).

Required:

(i) Calculate the Risk adjusted expected NPV for Project A.

(ii) Construct a Decision Tree for the proposed investment Project –B.

(iii) Calculate the risk adjusted expected NPV for B.

(iv) Identify the best and the worst possible outcomes for B.

(v) Which of the projects, if any, would you recommend? Why? 2+(2+1)+2+1

[Given: PVIF (14% 1 yrs.) = 0.877, PVIF (14%, 2 yrs.) = 0.769,
PVIF (14%, 3 yrs.) = 0.675, PVIFA (14%, 2 yrs.) = 1.646
PVIFA (14%, 3 yrs.) = 2.322]

(b) PAN PHARMA LTD. (PPL) has acquired an export order for ₹ 15 million for formulation to RANP (P) Ltd. a European Company. The PPL has also planned to import bulk drugs worth ₹ 10 million from RODON Ltd., a company in U.K. The proceeds of export will be realized in 3 months from now and the payments for import will be due after six months from now. The invoicing of these exports and imports can be done in any currency i.e. Dollar, Euro or Pounds sterling at company's choice. The following market quotes are available:

	Spot Rate	Annualized Premium
₹/$	80.10/80.20	$ =8%
₹/Euro	76.15/76.20	Euro =7%
₹/Pounds	98.65/98.75	Pound = 6%

Required:

As a financial consultant what recommendation would you make to the PAN Pharma Ltd. about invoicing in which currency for proceeds of export and in which currency for payment of import?

(Calculation should be upto 3 decimal points) 3+3+2

8. Answer *any four* out of the following five questions: 4×4

(a) The following independent situations are given. Identify the type of risk and state whether it is systematic or unsystematic risk:

(You may choose to write only the Roman numeral under the appropriate head).

(i) Short-term interest rates increase unexpectedly.

(ii) An oil tanker ruptures, creating a large oil spill

(iii) A firm's technical wizard is called in an auto accident

(iv) Cabinet votes for a massive tax cut

(v) Oil is discovered by ONGC in the KG Basin

(vi) The RBI follows a restrictive monetary policy

(vii) There is a precipitous rise in long-term interest rate.

(viii) A Supreme Court decision substantially broadens producer liability for injuries suffered by product users.

(b) How is value-at-risk (VaR) method used by a firm for measuring the Exchange Rate Risk in Management decisions?

(c) Differentiate between future contract and option contract with respect to the following aspects:

(i) Settlement/cash flow

(ii) Price Fixation

(iii) Obligation to Perform

(iv) Timing

(d) What are the principal business of the following entities (NBFCs)?

(i) Asset finance company

(ii) Investment company

(iii) Non banking financial company-factor

(iv) Infrastructure finance company

(e) Enumerate what are the steps involved in Cash flows in Home currency.

SUGGESTED ANSWERS TO QUESTIONS

SECTION – A

1.

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

SECTION – B

2. (a)

Present Value of Cash Outflows in the Borrowing Option ₹ 72.2998 Lakh

Present Value of Cash Outflows in the Leasing Option ₹ 49.956 Lakh

Suggestion : Since Present Value of Cash Outflows (Rs. 49.9560 lakh) is lower in the Leasing Option than the PV of Borrowing Option (Rs. 72.2998 lakh), MEDCO Hospital should accept the leasing option to acquire DNA testing Equipment.

2. (b)

Net Present Value of the Proposal = ₹ -23.158 Lakh

Since NPV (– 23.158 Lakh) is negative, the Proposal of HAL Ltd. (Lessor) to Medco Hospital is not Viable.

Comment :

For Feasibility, HAL Ltd. (Lessor) has to increase the lease rents. But he cannot do so to give a Positive NPV. Since it will then be infeasible for MEDCO Hospital (Lessee). Then Medco Hospital will go for outright purchase instead of lease. Hence HAL Ltd. should only consider using borrowing funds, so that at least he can take the marginal after tax cost of capital to justify this venture. However in the Long run, it has to positive NPV at the Weighted average after tax cost of Capital to Justify acceptability. He could work on decreasing the initial cost, since he may be buying many such equipments and therefore be eligible for substantail discount. Most importantly he should lower his Cost of Capital to be competitive.

3. (a)

(i)

	Mutual Fund –BS		Market Port Folio	
	Return (%)	Risk of Loss	Return (%)	Risk of Loss
Average	= 1.50	= 0.85	= 1.45	= 0.80

(ii) Morning Star Index (MSI) of Mutual Fund BS and Market Portfolio:

Particulars	Mutual Fund BS (%)	Market PortFolio (%)
Morning Star Index (MSI)	0.65	0.65

(iii) Treynor's Ratio of Mutual Fund – BS = 2.7154

3. (b)

(i) $E_s = 53\%$

$\sigma_S = 26.24\%$

$E_E = 38.25\%$

$\sigma_E = 18.05\%$

(ii) Expected return of risk free portfolio = 44.26 %

4. (a)

Case - 1: Investment in Japanese Index Funds:

Profit = Rs. 141.7390 (in Million)

Profit (%) = 7.0869%

Case - 2: Investment in US – Treasury Bills:

Profit = Rs. 141.746 (in Million)

Profit (%) = 7.087%

Suggestion *:* IXOTICA Ltd. should invest in US –Treasury Bills, Since by investing in US – Treasury Bills, IXOTICA Ltd. is taking a lower to default as well as Currency risk, since US – Treasury Bills are considered to be safe Heaven Instruments.

There by investing in US – Treasury Bills, is maintaining the same return as compared to that of JPY Index Fund, while minimizing the risk.

4. (b)

(i) In order to hedge its position, trader would go short on future at current future price of Rs. 64 per kg. This will help the trader the realize sure Rs 64 per kg. after 3 months.

(ii) No. of contracts to be sold 25

(iii) Gain/(loss) on future position Rs. 25000

(iv) Effective selling price Rs. 63 per kg.

5. (a)

(i) Portfolio Sensitivity:
Factor – 1: = 0.45
Factor – 2: = 0.30

(ii) Portfolio Sensitivity :
Factor – 1: = 0.90
Factor – 2: = 0.60

(iii) Expected Return Premium for Factor – 2 is 8.33 %

5. (b)

(i) Income available for Distribution = ₹ 36.9781 Lakh

(ii) Issue Price at the end of October = ₹ 23.0418

(iii) Repurchase Price at the end of November = ₹ 22.2768

(iv) NAV as on 31st December = ₹ 24.3204

6. (a)

(i) Value of Call = Rs. 14.43

(ii) Value of Put option (Under Put Call Parity) = Rs. 4.64

(iii) Expected Value of Option = Rs. 13.50
Expected Value of Stock Price at the end of three months = Rs. 363.60

6. (b)

(i) The Characteristic Line on Stock P : Y = 4.028 + 0.688 χ

(ii) Stock's return = 15.188 %

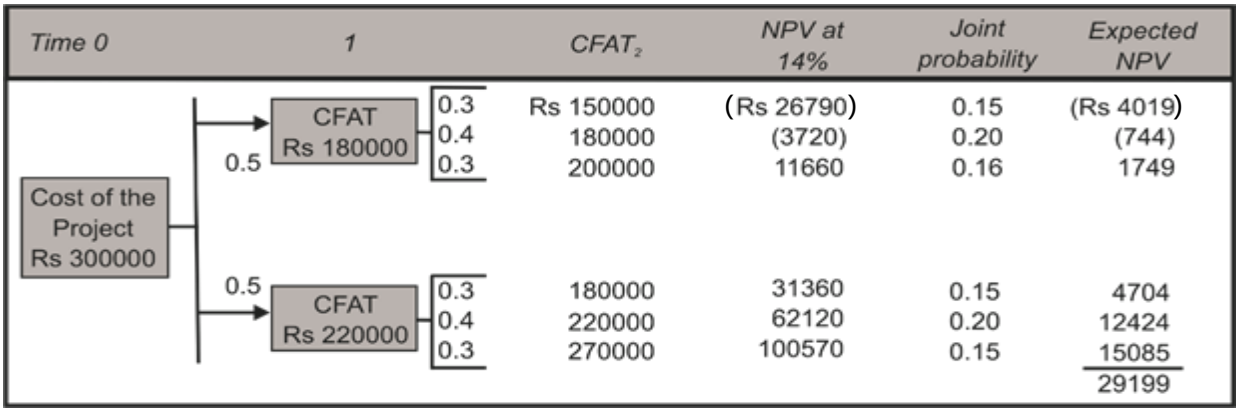
(iii) Correlation Co-efficient (P_{mp}) = 0.901

Even in spite of a high Correlation, the data is not compatible since the Correclation Co-efficient is reported high only be periods 2 and 3, where data on both market and stock is identical, whereas period 4, shows opposite correlation. Since the data is widely fluctuating, the expected values of Covariance tend to average and hence the value as per characteristics Line and the actual data are very different.

7. (a)

(i) Risk adjusted expected NPV of project A = ₹ 29,200

(ii) & (iii) Expected NPV of Project B:Decision Tree



(iv) The worst possible outcome is a CFAT of Rs. 1,80,000 (year 1) and Rs. 1,50,000 (year 2) with the maximum negative NPV as Rs. 26,790.

The best possible outcome is when NPV is maximum, Rs. 1,00,570. It results when CFAT in year 1 is Rs. 2,20,000, followed by Rs. 2,70,000 in year 2.

(v) The expected NPVs are the same for both projects. However, from the point of view of risk, project A should be chosen as there is no variability of possible events.

7. (b)

Position of Inflow under three Currencies:

Currency	Invoice at Spot Rate	Expected Rate after 3 Months	Conversion in INR after 3 Months
$	= $ 187265.918	= Rs 81.702	= Rs 15300000.032
€	= € 196979.645	= Rs 77.483	= Rs 15262573.833
£	£ = 152052.712	= Rs 100.130	= Rs 15225038.053

Payment of Import in INR = Rs 10 Million. Position of Outflow under three Currencies will be as follows :

Currency	Invoice at Spot Rate	Expected Rate after Six Months	Conversion in INR after Six Months
$	= $ 124688.279	= Rs 83.408	= Rs 10400000
€	= € 131233.596	= Rs 78.867	= Rs 10350000
£	= £ 101265.823	= Rs 101.712	= Rs 10299949

Recommendation:

Since Cash inflow is highest (Rs. 15300000) in Case of $, the invoicing for proceeds of export should be in $ (Dollars Currency).

Further, Since Cash Outflow is least (Rs10299949) in Case of £ the invoicing for payment of Import should be in £ (Pound Sterling Currency).

8.

(a) Identification of Risk:

(i) Systematic Risk
(ii) Un-systematic Risk
(iii) Un-Systematic Risk
(iv) Systematic Risk
(v) Un-Systematic Risk
(vi) Systematic Risk
(vii) Systematic Risk
(viii) Systematic Risk

(b) Value – at – Risk (VaR):

The Value – at – Risk (Var) Calulation depends on three Parameters as per given below :

(i) The holding period, i.e., the length of time over which the foreign exchange position is planned to be held (The typical holding period is 1 day).

(ii) The confidence level at which the estimate is planned to be made. The usual confidence levels are 99% and 95%.

(iii) The unit of currency to be used for the denomination of the VaR.

VaR = – Vp (Mp + 2.33 Sp)

whereVp is the initial value (in currency units) of the foreign exchange position.

Mp is the mean of the currency return on the firm's total foreign exchange position, which is a weighted average of individual foreign exchange positions.

Sp is the standard deviation of the currency return on the firm's total foreign exchange position, which is the standard deviation of the weighted transformation of the variance-covariance matrix of individual foreign exchange positions (note that the latter includes the correlations of individual foreign exchange positions).

(c) Distintion betweeen Future Contract and Option Contract :

	Future Contract	Option Contract
(i)	Profit / Loss is settled on a daily basis based on movement in Current Futures Price.	Option writer collects premium at the inception of the Contract.
(ii)	Determined by the market forces i.e. based on Demand and Supply.	Exercise Price / Strike Price fixed by the Stock Exchange. Premium is market determined.
(iii)	Both parties are under obligation to perform.	Only the Writer / Seller of the option is under obligation to perform.
(iv)	Exchange would fix the expiry date. Contracts can be entered into any time for periods upto the expiry date for that contract.	Exchange would fix the expiry date. Contracts can be entered into any time for periods upto the expiry date for that contract.

(d) Principal Business for :

(i) Asset Finance Company:

Asset Finance Company is a Company which carries on as its Principal business the financing of Physical assets supporting productive / economic and general purpose assets.

(ii) Investment Company:

Investment Company means any Company which carries on its principal business the acquisition of secirities.

(iii) Non – Banking Financial Company – Factor:

Non – Banking Financial Company Factor is a non deposit taking NBFC engaged in the Principal business of Factoring.

(iv) Infrastructure Finance Company:

Infrastructure Finance Company is a Company which carries on as its Principal business, the financing of the acquisition or construction of Infrastrue Facilities of various kinds.

(e) Steps involved in Cash Flows in Home currency are enumerated below :

(a) Step 1 : Compute the Operating and Investing Cash Flows in Foreign Currency.

(b) Step 2 : Compute the expected Future Spot Rate based on inflation, interest rate differentials or annualized appreciation or depreciation in Foreign Currency.

(c) Step 3 : Convert the Foreign Currency Cash Flows into Home Currency Cash Flows using such Future Spot Rates.

(d) Step 4 : Compute the Home Currency Discount Rate.

(e) Step 5 : Evaluate the project by discounting the Cash flows expressed in Home Currency using the Home Currency Discount Rate to identify the Project NPV in Home Currency Terms.