18534

FINAL EXAMINATION

December 2022

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. Working Notes should form part of the respective answers. Wherever necessary, candidates may make appropriate assumptions and clearly state them in 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 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 question 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.

- Choose the correct option from the four alternatives given: (1 mark is for the correct choice and 1 mark is for the justification/workings. You may present only the Roman numeral, your choice and the reason/working, without copying the question).
 2×10=20
 - (i) The initial outlay for a equipment of RAGIN Ltd. is ₹ 10,00,000. It is estimated that this will generate cash in flows of ₹ 3,40,000 per annum for 4 years. The Cost of Capital of the Company is 5 per cent. (Ignore Taxes).

By how much can the Annual Cash in flows change before the Company becomes indifferent to the Project?

[Given : PVI FA (5%, 4 years) = 3.546]

[Present Calculation to nearest rupees]

- (A) ₹ 57,992
- (B) ₹ 60,125
- (C) ₹61,310
- (D) None of the above

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- (ii) MS PARNA is planning to construct a minimum risk portfolio by investing in the Shares of NAB Ltd., and SAN Ltd. The risk associated with the return of NAB Ltd. and SAN Ltd. are 23% and 25% respectively. If the co-variance between the returns of Shares of both companies is 0 (zero), the proportion of funds to be invested in the Shares of NAB Ltd. will be:
 - (A) 45·84%
 - (B) 54·16%
 - (C) 66·67%
 - (D) None of the above
- (iii) The Closing prices of the Stock of TORRENT LTD. on consecutive trading days are as under:

Days	Closing pricing (₹)
1	125.45
2	135.25
3	132.75
4	142.75
5	145.25

The Relative Strength of the stock of Torrent Ltd. is

- (A) 0.9875
- (B) 1·0255
- (C) 1.0628
- (D) None of the above
- (iv) A Project has a Net Present Value (base Case NPV) of ₹ 1,20,000. However, this project has one financial side effects; it expands the firm's borrowing power by ₹ 4,80,000. The project lasts indefinitely so it is treated as supporting perpetual debt. If the borrowing rate is 15 per cent and the net tax shield is 35 per cent, what will be the Adjusted Net Present Value (ANPV) of the project?
 - (A) ₹2,90,000
 - (B) ₹ 2,88,000
 - (C) ₹2,40,000
 - (D) None of the above
- (v) The Current Price of ACC's stock is ₹ 1,010 and it is expected that price of stock may either go up to ₹ 1,212 or go down to ₹ 808. If the stock price of call option of ACC's stock is ₹ 1,010 and Risk – free rate is 6.5%, the probability of decrease in stock price will be
 - (A) 0.6625
 - (B) 0.5230
 - (C) 0.4680
 - (D) 0·3375

- (vi) An option's theoretical value increase by 1.50 if the interest rate is decrease by 1%. Then, 1.50 is
 - (A) The Gamma of a call option
 - (B) The Theta of a put option
 - (C) The Rho of a put option
 - (D) The Rho of a call option
- (vii) LONZA Ltd., an export customer who relied on the inter bank rate of ₹/US\$ 80.50/15 requested his banker to purchase a bill for US\$ 1,00,000. What is the rate to be quoted to LONZA Ltd., if the banker wants a margin of 0.10%? (Calculation rounded off to two decimal point)
 - (A) ₹80.58
 - (B) ₹ 80·42
 - (C) ₹80·12
 - (D) ₹78.90
- (viii) Consider a bullish spread option strategy using call option on the stock of GANT LTd., with ₹ 60 exercise price, priced at ₹ 6 and a call option with ₹ 75 exercise price, priced at ₹ 3.50. The current market price of stock of Gant Ltd., is ₹ 67. If the price of the stock is ₹ 95 on maturity, the net profit at expiration will be
 - (A) ₹8.50
 - (B) ₹ 10.50
 - (C) ₹12.50
 - (D) ₹15.00
 - (ix) The Sharpe ratio and Treynor ratio of CHOLA EQUITY FUND are 0.37 and 4.16 respectively. The risk premium on the Fund is 6%. Standard deviation of the Fund's return is 11.80%. If the standard deviation of the Market Index's return is 9.56%, the Correlation Co-efficient between return of the Fund and the Market will be
 - (A) 0.90
 - (B) 0.85
 - (C) 0·72
 - (D) None of the above
 - (x) A call option is written for a strike price of ₹ 400, with a premium of ₹ 50.
 - (A) The holder's maximum loss is ₹ 50
 - (B) The holder's maximum gain is ₹ 50
 - (C) The writer's maximum loss is ₹ 50
 - (D) The writer's maximum gain is ₹ 50

2.

Section B

Answer any five questions.

(a) MEX Ltd., has an investment proposal, requiring an outlay of ₹ 10 Lakh. 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 in flow after tax will be \gtrless 6 lakh and 0.6 probability that cash in flow after tax will be \gtrless 8 lakh. The probability assigned to cash in flow after tax for year 2 are as follows:

Cash in flow for year 1 (₹)	n in flow for year 1 (₹) 6 Lakhs 8 Lak		Lakhs	
Cash in flow for year 2	₹	Probability	. ₹	Probability
-	3.00 Lakh	0.2.	4 Lakh	0.4
	4.00 Lakh	0.3	6 Lakh	0:5
	5.00 Lakh	0.5	7 Lakh	0.1

The company used 12% discount rate for this type of investment.

Required:

- (i) Construct a Decision Tree for the proposed investment project.
- (ii) Calculate the expected Net Present Value (NPV), giving the break up of each path of the decision tree.
- (iii) What Net Present Value will be the project yield, if the worst outcome is realized? What is its probability?
- (iv) What is the probability of having a negative NPV?
- (v) Will the project be accepted?

[Given : PVIF (r, n yrs.)]:

YEAR	1	2	3	4	5	6
PVIF (12%, Yr)	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066

 $2+5+(1\times3)=10$

(b) AGRON LTD. is Contemplating whether to replace an existing machine or to spend money on overhauling it. Agron Ltd. currently pays no taxes. The replacement machine costs ₹ 1,00,000 now and requires maintenance of ₹ 10,000 at the end of every year for 8 years. At the end of 8 years, it would have a salvage value of ₹ 20,000 and would be sold. The existing machine requires increasing amounts of maintenance each year and its salvage value falls each year as follows:

Years	Maintenance (₹)	Salvage (₹)
Present	0	40,000
1	10,000	25,000
2	20,000	15,000
3	30,000	10,000
4	40,000	0

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The Opportunity Cost of Capital for AGRON LTD. is 10%

[Given PVIF]:

End of year	1	2	3	4	5	6	7	8
Present value	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665
factor @ 10%		2		2				

PVI FA (10%, 8 yrs.) = 5.3349 (Ignore Taxation)

Required:

When should the AGRON Ltd. replace the Machine?

3+2+1=6

(a) SHS Asset Management Company provides the following information about three funds CMB (All equity fund), BCG (Equal Debt and Equity) and SFM (20% Equity and 80% Debt):

Particular	СМВ	BCG	SFM
Average Return	30%	20%	15%
Standard Deviation	12%	6%	5%
Correlation with Market	0.40	0.75	0.60

Risk Free Return is 6% and Return on Market Portfolio is 20%, with a standard deviation of 5%.

Required:

Determine for each of the three Funds:

- (i) Total Gain and the Net Gain under FAMA's Net Selectivity
- (ii) Systematic Risk and Unsystematic Risk

3+4+3=10

(b) DWARKA Mutual Fund has the following assets in Scheme Stargold at the close of business on 31st March, 2022.

Company	No. of Shares	Market Price per Share (₹)
A Ltd.	20,000	25
B Ltd.	30,000	350
C Ltd.	38,000	290
D Ltd.	50,000	400

The total number of units of Scheme Stargold are 10 lakhs. The Scheme Stargold has accrued expenses of ₹ 2,00,000 and other liabilities of ₹ 2,50,000.

You are required to ascertain the NAV per unit of the Scheme Stargold as on 31.03.2022. 4+2=6

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(a) BINT Ltd.'s equity shares are presently selling at a price of ₹ 600 each. MS ASHINA, an investor is interested in purchasing Bint Ltd.'s shares. The investor expects that there is a 70% chance that the price will go up to ₹ 750 or a 30% chance that it will go down to ₹ 550, three months from now. There is a call option on the shares of the company that can be exercised only at the end of three months at an exercise price of ₹ 650.

Required:

Calculate the following:

- (i) If the investor wants a perfect hedge, what combination of the share and option should she select?
- (ii) Explain how the investor will be able to maintain identical position regardless of the Share Price.
- (iii) If the risk free rate of return 5% for the three months period, what is the value of the call option at the beginning of the period?
- (iv) What is the expected return on the call option? 2+2+2+2=8

Shares	Portfolio Weight	Beta	Expected return in (%)	Total Variance
GSD	0.20	0.40	14	0.015
DGS	0.50	0.50	15	0.025
BM	0.30	1.10	21	0.100

(b) The following are the details of a PORTFOLIO consisting of three shares:

Standard Deviation of Market Portfolio Returns is 10%.

Covariance (GSD, DGS) = 0.030

Covariance (DGS, BM) = 0.020

Covariance (BM, GSD) = 0.040

Required:

Calculate the following:

- (i) Portfolio Beta
- (ii) Systemic Risk of each of the three shares
- (iii) Systemic Variance of Portfolio
- (iv) Portfolio Variance (on the basis of Modern Portfolio Theory given by Markowitz) 2+2+1+3=8

Security	Market price (₹)	No. of Shares	β-Value
A Ltd.	29.40	400	0.59
B Ltd.	318.70	800	1.32
C Ltd.	660.20	150	0.87
D Ltd.	275.40	750	1.24
E Ltd.	281.90	400	1.16

 (a) MR. TRITIN, an Investor has a Portfolio consisting of Five Securities on April 2022 as shown below:

The cost of capital for the investor is 20% p.a. Continuous Compounded. The investor fears a fall in the price of the shares in the near future. Accordingly, he approaches you for the advice to protect the interest of his portfolio.

You can make use of the following information:

- (i) The current NIFTY value is 10200.
- (ii) NIFTY Futures can be traded in Units of 25 only.
- (iii) Futures for May are currently quoted at 10440 and futures for June are being quoted at 10620.

You are required to calculate:

- (i) The beta of Investor's portfolio.
- (ii) The theoretical value of the futures contract for contracts expiring in May and June.
- (iii) The number of NIFTY contracts that he would have to sell if he desires to hedge until June in his total portfolio.
- (iv) If MR TRITIN seeks to increase the portfolio Beta to 2.30, what will be the proportion of market value of investments B Ltd. to the value of total investments plus 10% margin on futures? (NIFTY Value is 10200).

(No. of contracts and Amount to be rounded off to the nearest integer and Calculations to be considered upto 4 decimal points.)

[Given : In (1·20) = 0·18232, $e^{0.03}$ = 1·03045, $e^{0.033}$ = 1·03355, $e^{0.046} = 1.04707, e^{0.05} = 1.0512, e^{0.0333} = 1.03386$]

(No. of months in a year is 12 months)

2+3+2+3=10

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(b) SONET LTD. engaged in the production of synthetic yarn is planning to expand its operations. In this context, the company is planning to import a multi-purpose machine from Japan at a cost of ¥ (Yen) 2,460 lakhs. The company is in a position to borrow funds from its bank in India to finance import at the interest rate of 12% per annum with quarterly rests. A bank in Tokyo has also offered to extend credit of 90 days at 2% per annum against opening of an irrevocable letter of credit.

Other information is as under:

Present exchange rate: ₹ 100 = ¥ 246

90 Days forward rate: ₹ 100 = ¥ 250

Commission charges for letter of credit is @4% per annum.

Assume 1 year = 365 days

Required

Advise whether the offer from bank in Tokyo should be accepted. 2+4=6

(a) Bitrin Ltd. had only one Water Pollution Control Machine in this type of block of asset, with no book value under the provisions of the Income Tax Act, 1961 as it was subject to rate of depreciation of 100% in the very first year of installation.

Due to funds crunch Bitrin Ltd. decided to sell the machine which can be sold in the market, of any one for ₹ 5,00,000 easily.

Understanding this from a reliable source Cetna Ltd. came forward to buy the machine for ₹ 5,00,000 and lease it to Bitrin Ltd. for lease rental of ₹ 90,000 p.a. for 5 years. Bitrin Ltd. decided to invest the next sale proceed in a risk free deposit, fetching yearly interest of 8.75% to generate some cash flow. It also decided to relook the entire issue afresh after the said period of 5 years.

Another company, Delta Ltd. also approached Bitrin Ltd., proposing to sell a similar machine for \gtrless 4,00,000 to the latter and undertook to buy it back at the end of 5 years for \gtrless 1,00,000 provided the maintenance were entrusted to Delta Ltd. for yearly charge of \gtrless 15,000. Bitrin Ltd. would utilize the net sale proceeds of the old machine to fund this machine also this offer.

The marginal rate of tax of Bitrin Ltd. is 34% and its weighted average cost of capital is 12%.

YEAR	1	2	3	4	5
2	0.893	0.797	0.712	0.636	0.567

Discounting factors @ 12%

Required:

Which Company's proposal you should recommend to accept to the Company (Bitrin Ltd.)? 1+3+1+2+1=8

6.

(b) MR. BOSTAN an investor is evaluating the prospects of investing in Stock COB. He has estimated the returns associated with this stock and also the returns associated with the Market Index based on the Subjective probability approach. His estimates are as follows:

Economic Scenario	Drobability	Returns Associated with (9		
Economic Scenario	Frobability	Stock - COB	Market Index	
Recession	0.20	18	15	
Normal	0.40	16	18	
Boom	0.40	25	20	

Required:

Calculate the following:

- (i) Expected Return of Stock-COB and Market.
- (ii) Expected Standard Deviations of Stock-COB and Market.
- (iii) The Co-variances between Return of Stock-COB and Market.
- (iv) The Co-efficient of Corelation between the returns of Stock-COB and Market.
 2+2+2+2=8
- (a) PAZOMB LTD. (PL) exports edible oils to Middle-East and African Countries. In June, 2022 the company exported an consignment worth \$6 million to Zambia. The payment for the same is expected to realize during the month of September, 2022. The Company has entered into an option forward contract for delivery of \$6 million over the month of September.

The market quotes on June 30, 2022 at the time of entering into the contract were as follows:

SPOT	₹/\$	78.05/08
Forward	1 Month	23/25 paise
	2 Month	47/49 paise
	3 Month	70/72 paise

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On September 2022 the Company approached the bank for extension of the contract by another two months that is for delivery during the month of November.

The market quotes on September 2022 were as follows:

SPOT	₹/\$	78.58/60	
Forward	1 Month	20 / 22 paise	
	2 Month	37 / 39 paise	
	3 Month	55 / 57 paise	

On November, 2022 the company approached the bank to cancel the forward contract.

The exchange rates as on November, 2022 were as follows:

SPOT	₹/\$	79.05/10
Forward	1 Month	18/20 paise
	2 Month	33/35 paise

Required:

Calculate the following:

- (i) The forward rate to be quoted on June 30, 2022.
- (ii) The exchange rate to be quoted by the bank on September, 2022 for the extension of the contract.
- (iii) The amount of cash flows due to extension of the contract.
- (iv) The exchange rate at which the forward contract to be cancelled on November, 2022.
- (v) The amount of Cash flows due to cancellation of the contract

(Ignore FEDAI margin for merchant quotes.)

1+1+2+2+2=8

(b) MS. HARSHITA, an Investor would like to construct a portfolio consisting of securities ALFA and GAMA such that 70% of the investment is made in the security that has the better return per unit of risk and the rest in the other security. She has collected the following information about the proposed investment.

	ALFA	GAMA
Standard Deviation	15%	20%
Expected Return	20%	30%

The Co-efficient of Correlation between ALFA and GAMA is 0.25. **Required:**

- (i) Calculate the expected return of the Portfolio desired to be constructed by Harshita.
- (ii) Ascertain the expected return of Portfolio set on minimum Variance.
- (iii) Find the Risk Factor of the Portfolios under (i).

2+4+2=8

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

(a) Differentiate between Capital Market and Money Market with respect to the following aspects.

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 $4 \times 4 = 16$

- (i) Type of Investment
- (ii) Participants
- (iii) Regulators
- (iv) Risk
- (b) What are the factors to be considered in valuing an option under Binomial Tree Approach?
- (c) Enumerate what are the Tools and Techniques used by RBI to maintain financial stability.
- (d) State the role of Financial Intermediaries in Swap arrangement.
- (e) List down what are participants in commodity future.

SUGGESTED ANSWERS TO QUESTIONS

SECTION – A

1.	
(i)	(A)
(ii)	(B)
(iii)	(C)
(iv)	(B)
(v)	(D)
(vi)	(C)
(vii)	(B)
(viii)	(C)
(ix)	(B)
(x)	(A)

SECTION – B

(Answer any five questions)



2+5+(1X3) = 10 Marks

(ii) The Decision Tree given above shows that there are six possible outcomes each represented by a path.

Expected NPV

Path	NPV @ 12% (a)	Joint Probability (b)	Expected NPV = $(a) x (b)$
1.	(225100)	0.08	(18008)
2.	(145380)	0.12	(17446)
3.	(65660)	0.20	(13132)
4.	33200	0.24	7968
5.	192640	0.30	57792
6.	272360	0.06	16342
	TOTAL	1.00	33516

(iii) If the worst outcome is realized, the Net present value (NPV) which the project will yield is Rs. (225100) Negative. Its probability is 8% and a Loss of Rs 18008 (Path -1)

(iv) The probability of having a Negative NPV is (0.08 + 0.12 + 0.20) = 0.40 i.e. 40%.

(v) Yes, the project will be accepted since the total expected Net present value (ENPV) is positive of Rs. 33516 based on Joint probability.

3+2+1 = 6 Marks

2 (b) :

Equivalent Annual Cost of New Machine

Particulars	Rs
Cost of New Machine	100000
Add : P. V. of Annual Repairs Maintenance 10000 x 5.3349	53349
Less :P. V. of Salvage Value at the end of 8 years (20000 x 0.4665).	9330
Equivalent Annual Cost	Rs 26996

Equivalent Annual Cost of (EAC) of keeping the existing Machine

Year	1	2	3	4
P. V. of Salvage Value of Old Machine	40000	25000	15000	10000
Add : P. V. of Annual Maintenance Cost	9091	18181	27273	36364
Annual Cost ÷ 1.10				
Less : P. V. of Salvage Value at the end of the year	22727	13636	9091	0
$(P.V. \div 1.10)$				
	26364	29545	33182	46364
Equivalent Annual Cost :	29000	32500	36500	51000

Recommendation:

The Company should replace the old Machine now, since the Equivalent Annual Cost of new machine at Rs 26996 is lower than the cost of using the existing Machine in the First year, Second year, third and Fourth year.

3 (a) :

Evaluation of Funds CMB, BCG and SFM.

	FUNDS		
PARTICULARS	CMB	BCG	SFM
Fama's Net Selectivity [Net Gain]	(9.6%)	(2.80%)	(5%)
Total Gain	10.56%	1.40%	0.60%
Systematic Risk	11.52%	5.40%	3%
Unsystematic Risk	0.48%	0.60%	2%

3 (b) :

NAV per Unit as on 31.03.2022 = Rs 41.57

4 (a):

- (i) The investor should purchase 0.50 share for every 1 Call Option. Or the investor should purchase 1 share for every 2 call options.
- (ii) How the investor will be able to maintain his position if he purchase 0.50 share for 1 Call Option Written?
- (a) If price of share goes upto 750 then value of purchased share will be : Rs. 275
- (b) If price of Share Comes down to Rs 550 then Value of purchased share will be : Rs 275
- (iii) The value of the option at the beginning of the period is = Rs 38.10
- (iv) Expected Return on the Call Option : = 83.73 %

2

4+2 = 6 Marks

3+4+3 = 10 Marks

2+2+2+2= 8 Marks

- (i) Portfolio β : 0.66
- Systematic Risk : (ii)

GSD - 0.0016 or 0.16% DGS - 0.0025 or 0.25%

- BM 0.0121 or 1.21%
- Systematic Variance of Portfolio: = 0.004356 i.e. 0.4356 % (iii)
- (iv) Portfolio variance on the basis of Markowitz Theory := 0.03265

5 (a):

- (i) Portfolio Beta (β_{P}) = 1.1920
- (ii) Theoretical Value of the Future Contract for Contracts expiring in May and June : Price of the May Contract := Rs 10545 or Rs 10546 Price of the June Contract := Rs 10722 or Rs 10723 **Alternative Solution :** The price of May Contract := Rs 10511 or Rs 10510 Price of June Contract : = Rs10680 or 10681
- No. of NIFTY Contracts required to sell to hedge until June in total Portfolio : (iii) = 3 Contracts
- Proportion of Market Value of Investments in B Ltd., to the value of Total Investments Plus (iv) 10% Margin on Future :

= 0.3348 i.e. 33.48%

5 (b) :

Evaluation of Options :

Particulars	Amount in Rs Lakhs	
Option I		
Financing Import by Borrowing @12% interest rate p.a.		
Total Cash Outflow (for borrowing funds from bank in India)	<u>1030</u>	
Option II		
Offer from Foreign Branch		
Total Cost	Rs 999.15 Lakhs	

Recommendation:

Option II, i.e. Offer of foreign branch is cheaper & better. Therefore the Offer from a bank in Tokyo should be accepted.

6 (a):

(i) First Option : Leasing from Cetna Ltd. :

The Net Present Value (NPV) is Rs 41675 Or Rs 41673

(ii) Second Option : Purchase from Delta Ltd. :

The Net Present Value (NPV) is Rs 53181 or Rs 53180

Recommendation:

The Proposal of Delta Ltd. may be recommended to accept to the Bitrin Ltd. Since in the said proposal Net present value (NPV) (gain) will be increased by (53181 - 41675) = Rs 11506.

3

2+2+1+3 = 8 Marks

2+4 = 6 Marks

2+3+2+3 = 10 Marks

1+3+1+2+1 = 8 Marks

2+2+2+2 = 8 Marks

1+1+2+2+2 = 8 Marks

- (i) The expected rate of Return : Stock COB : 20%, Market : 18.20%
- (ii) Expected Standard deviation of : Stock-COB : 4.15%, Market = 1.83%
- (iii) Covariance (C.M.) = 5.20^2
- (iv) The Co-efficient of Correlation between Stock-COB and Market = 0.68

7 (a) :

(i) The company obtained a forward cover for its receivable of US \$ 6 million on June 30 for delivery in September.

The Forward rate to be quoted is	Rs 78.05
Add: 2 months premium since	0.47
The Dollar is at Premium	Rs.78.52

- (ii) The exchange rate to be quoted on September for delivery November is Rs (78.58 + 0.37) = Rs78.95
- (iii) On September 01, the Company approach for extension by 3 month. The request of the Company is considered by cancelling at one month forward selling rate that is Rs 78.82 (78.60 + 0.22). The amount of Cash Flow due to extension of the Contract is as follows:
 Bank buys Dollars under original contract at: Rs 78.52
 Bank Sells under cancellation at: Rs 78.82
 Difference payable by the Company is per \$ Rs 0.30
 Amount of CASH FLOW due to extension of the contract is: 0.30 x 6million = Rs 1.8 million
- (iv) The Company approached for cancellation on November, 01 which means only cancellation by one month. The contract would be cancelled at one month forward selling rate prevailing on the date of cancellation.

That is (Rs 79.10 + Premium Rs 0.20) = Rs 79.30

(v) The amount of CASH FLOW due to Cancellation of Forward Contract is as follows : Bank Sells under original contract at Bank Sells on Cancellation: Amount payable by the Company is per \$ Rs 0.35 Total Cash Flow due to cancellation is (6million x 0.35) = Rs 2.1 million

7 (b) :

2+4+2 = 8 Marks

- (i) Expected Return of Desired Portfolio = 0.27 i.e. 27 %
- (ii) Expected Return of Portfolio Set on minimum Variance = 23.158 i.e. 23.16%
- (iii) Risk Factor of Portfolio under (i) : = 15.74 i.e. 15.74 %

6 (b):

4X4 = 16 Marks

8: Answer <u>any FOUR</u> from the following five questions:

(a) Difference between Capital Market and Money Market :

Aspect	Capital Market	Money Markets
Type of	Debt and Equity Instruments, e.g.,	Debt Instruments only, e.g.,
investment	Equity Shares, Preference Shares,	Treasury Bills, Commercial
	Debentures, Zero Coupon Bonds	Papers, Commercial Bills,
		Certificate of Deposits.
Participants	Retail investors, Institutional	Bankers, Financial Institutions,
	investors (Mutual Funds), Financial	Reserve Bank of India,
	Institutions etc.	Government
Regulators	SEBI	RBI
Risk	Low Credit and Market Risk	High Credit and Market Risk
	involved	

- (b) The factor to be Considered in Valuing an option under Binomial Tree Approach : The following are the factors to be considered in valuing/pricing an option under the Binomial Tree Approach
 - (i) Current Spot Price of the underlying asset.
 - (ii) Exercise Price under the Options Contract.
 - (iii) Set of Expected Future Spot Prices one above the Exercise Price and one below the Exercise Price.
 - (iv) Risk Free Rate of Return.
 - (v) Period to Expiry.
- (c) Tools and techniques used by RBI to maintain financial stability:

The Reserve Bank makes use of a variety of tools and techniques to assess the build- up of systemic risks in the economy and to provide critical inputs in this respect to its policy making departments. The tools include:

- (i) A Financial Stress Indicator a contemporaneous indicator of conditions in financial markets and in the banking sector;
- (ii) Systemic Liquidity Indicator for assessing stresses in availability of systemic liquidity;
- (iii) A Fiscal Stress Indicator for assessing buildup of risks from the fiscal;
- (iv) A Network Model of the bilateral exposures in the financial system for assessing the interconnectedness in the system;
- (v) A Banking Stability Indicator for assessing risk factors having a bearing on the stability of the banking sector; and
- (vi) A series of Banking Stability Measures for assessing the systemic importance of individual banks.

- (d) Role of Financial intermediaries in swap arrangements.
 - Swap arrangements: Non-financial Companies do not get in touch directly to arrange a swap.
 They each deal with a financial intermediary such a Bank or other Financial Institution.
 - (ii) Contracts: The Financial Institution has two separate contracts, one with either party. Generally, the parties to the Swap arrangement will not know that the Financial Institution has entered into an offsetting swap with the other beneficiary.
 - (iii) Risk of Default: If one of the beneficiary Company defaults, the Financial Institution still has to honourits agreement with the other Company.
 - (iv) Compensation: Swaps are structured to ensure that the financial institution earns around 5% on a pair of offsetting transactions. The margin of 5 basis points is partly to compensate the Financial Institution for the risk that one of the two beneficiaries will default on the swap payments.
- (e) Participants In commodity Future:
 - (i) Farmers/Producers
 - (ii) Merchandisers/Traders
 - (iii) Importers
 - (iv) Exporters
 - (v) Consumers/Industry
 - (vi) Commodity Financers
 - (vii) Agriculture credit providing agencies
 - (viii) Corporate having price risk exposure in commodities.