Paper 14: Advance Financial Management

Total Allowed: 3hours **Full Marks: 100**

(Answer Question No.1 which is compulsory)

1.

a) Mr. X earns 10% on his investments in equity shares. He is considering a recently floated scheme of a Mutual Fund where the initial expenses are 6% and annual recurring expensed are expected to be 2%.how much the Mutual Fund scheme should earn to provide a return of 10% to Mr. X? **[3]**

b) Write any three differences between the primary market and the secondary market. **[3]**

c) On 1st April, 3 months interest rate in the US and Germany are 6.5 percent and 4.5 percent per annum respectively. The $/DM spot rate is 0.6560. What would be the forward rate for DM for delivery on 30th June? **[5]**

d) An investor is seeking the price to pay for a security, whose standard deviation is 4.00 per cent. The correlation coefficient for the security with the market is 0.8 and the market standard deviation is 2.2 per cent. The return from government securities is 5.2 per cent and from the market portfolio is 9.8 percent. The investor knows that, by calculating the required return, he can then determine the price to pay for the security. What is the required return on the security? **[4]**

e) Nile Ltd. issues 12% debentures of face value ₹100 each and realized ₹90 per debenture. The debentures are redeemable after 12 years at a premium of 10%. Company is paying tax at 35%.What will be the cost of debt. **[2]**

f) Tata Ltd. Has a target capital structure of 40% debt and 60% equity for one of its new subsidiaries. The yield to maturity of the company's outstanding bonds is 9% and the tax rate is 40%. The CFO has calculated the company's WACC as 9.96%. What is the company's equity cost of capital? **[3]**

Section A
(Answer any two of the following)

2. On 1st April, ABC Mutual Fund issued 20 Lakh Units at ₹10 per unit. Relevant Initial Expenses involved were ₹12 Lakhs. It invested the fund so raised in Capital Market Instruments to build a Portfolio of ₹185 Lakhs. During the month of April, it disposed off some of the instruments costing ₹60 Lakhs for ₹63 Lakhs and used the proceeds in purchasing Securities for ₹56Lakhs. Fund Management Expenses for the month of April were ₹8 Lakhs of which 10% was in arrears. In April, the fund earned Dividends amounting to ₹2 Lakhs and it distributed 80% of the realized earnings. On 30th April, the Market ' Mi of the Portfolio was ₹198 Lakhs.
Mr. Amit an Investor subscribed to 100 units on 1st April and disposed off the same at Closing NAV on 30th April. Discuses about his Annual Rate of Earning? **[12]**

3. **a)** Explain the responsibilities of the NBFCs accepting public deposits with regard to submission of returns and other information to RBI.

   b) Explain the function of Forward market commission of India. **[6+6=12]**

4. **a)** State the problems in the working of state cooperative Banks.

   b) A mutual fund made an issue of 10, 00,000 units of ₹10 each on January 01, 2012. No entry load was charged. It made the following investments:

50,000 Equity shares of ₹100 each @ ₹160 7% Government securities 9% Debenture (unlisted) 10% Debentures (listed)	₹80,00,000 ₹8,00,000 ₹5,00,000 ₹5,00,000
	₹98,00,000

[6+6=12]

Section – B
(Answer any one of the following)

5. **a)** Pepsi LTD. Exports edible oils to Middle- East and African countries. In June the company exported a consignment worth $5 million to Zambia. The payment for the same is expected to realize during the month of September. The company has entered into an option forward contract for delivery of $5 million over the month of September.
The market quotes on June 30 at the time of entering into the contract were as follows:

June 30, Spot	₹ /$	47.05/08
Forward	1 month	23/25 paise
	2 month	47/49 paise
	3 month	70/72 paise

On September '2012, 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 '2012 were as follows:

Spot	₹ /$	47.58/60
Forward	1 month	18/20 paise
	2 month	37/39 paise
	3 month	55/57 paise

On November '2012, the company approached the bank to cancel the forward contract. The exchange rates as on November '2012 were as follows:

Spot	₹ /$	47.97/99
Forward	1 month	16/18 paise
	2 month	33/35 paise

You are required to calculate:
(i) The forward arte to be quoted on June 30.
(ii) The exchange rate to be quoted by the bank on September '2012 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; 2012.
(v) The amount of cash flows due to cancellation of the contract.
(Ignore FEDAI margin for merchant quotes.)

b) Considering the following quotes
Spot (Euro/Pound) = 1.6543/1.6557
Spot (Pound/NZ$) =0.27860/0.2800
i) Calculate the % spread on the Euro/Pound Rate
ii) Calculate the % spread on the Pound/NZ$ Rate
iii) The maximum possible % spread on the cross rate between the Euro and the NZ$.

c) Can it be said that "Derivatives are complex and exotic instruments that Indian investors will have difficulty in understanding"?

[10+5+5=20]

6. **a)**The equity share of VCC Ltd. Is quoted at ₹210. A 3-month call option is available at a premium of ₹6 per share and a 3-month put option is available at a premium of ₹5 per share. Ascertain the net pay offs to the option holder of a call option and a put option.

i) The strike price in both cases is ₹220, and
ii) The share price on the exercise day is ₹ 200, 210, 220, 230, and 240.

Also indicate the price range at which the call and the put options may be gainfully exercised.

b) Does interest rate parity imply that interest rates are the same in all countries? Also explain why purchasing power parity might fail to hold.

c) An Indian exporter has sold handicrafts items to an American business house. The exporter will be receiving US$ 1, 00,000 in 90 days. Premium for a dollar put option with a strike price of ₹48 and a 90 days settlement is ₹1. The exporter anticipates the spot rate after 90 days to be ₹46.50.

i) Should the exporter hedge its account receivable in the option market?
ii) If the exporter is anticipating the spot rate to be ₹47.50 or ₹48.50 after 90 days, how would it effect the exporter's decision?

[10+5+5=20]

Section C
(Answer any one of the following)

7. Ms Mitrika an analyst at Ashika Securities Ltd. Is considering the stocks of Spark Ltd. And Global Ltd. For investment. Expected returns on these stocks depend on the growth rate GDP. The conditional returns of the market and the stocks are given below:

Economic Scenario GDP growth rate	Probability	Return on (%)		Return on market %
		Spark Ltd.	Global Ltd.	
1.0 - 3.0%	0.18	15	9	7
3.00 - 6.00%	0.24	25	14	11
6.00 – 8.00%	0.26	38	27	18
More than 8.00%	0.32	46	33	25

The expected risk-free return is 6.5%
Assume that CAPM holds good in the market
You are required to

i) Calculate the ex-ante-betas for the two stocks.
ii) Find out whether the stocks of Sparks Ltd. And Global Ltd. Are underpriced or overpriced.
iii) Calculate the proportion of systematic risk and unsystematic risk for both the companies.
iv) Determine which stock the analyst would suggest to invest. **[16]**

8. **a)**Compute Return under CAPM and the Average Return of the Portfolio from the following information:

Investment	Initial Price	Dividends	Market Price at the end of the year	Beta Risk Factor
A.Cement Ltd	25	2	50	0.80
Steel Ltd	35	2	60	0.70
Liquor Ltd	45	2	135	0.50
B.govt.of Indian Bonds	1,000	140	1005	0.99

Risk Free Return=14%.

b) X Ltd has an expected return of 22% and standard deviation of 40%. B Ltd. has an expected return of 24% and standard deviation of 38%. A Ltd. Has a beta of 0.86 and b Ltd. A beta of 1.24.the correlation coefficient between the return of A Ltd. And B Ltd. Is 0.72. The standard deviation of the market return is 20%. Suggest:

i) Is investing in B Ltd. Better than investing in A Ltd.?
ii) If you invest 30% in B Ltd. And 70% in A Ltd., what is your expected rate of return and portfolio standard deviation?
iii) What is the market portfolios expected rate of return and how much is the risk-free rate?
iv) What is the beta of portfolio if A Ltd.'s weight is 70% and B Ltd.'s weight is 30%?

[8+8=16]

Section D
(Answer any one of the following)

9. **a)**The following information has been extracted from the Balance Sheet of ABC Ltd.as on 31st December—

Component of capital	Equity Share	12% Debentures	18%Term Loan	Total
Amount Rs. In Lakhs	400	400	1200	2000

i) Determine the WACC of the Company. It had been paying dividends at a consistent rate of 20% per annum.
ii) What difference will it make if the current price of the Rs.100 share is Rs.160?
iii) Determine the effect of Income Tax on WACC under both the above situations.(Tax Rate = 40%).

b) "The concept of capital Budgeting arises in scenarios of uncertainty in cash flows" Explain it.

[15+5=20]

10. **a)** Red Ltd is considering a project with the following cash Flows (in ₹)

Years	Cost of Plant	Recurring Cost	Savings
0	10,000		
1		4,000	12,000
2		5,000	14,000

The Cost of Capital is 9%. Measure the Sensitivity of the project to changes in the Levels of plant Value, Running Cost and Savings (considering each factor at a time) such that NPV becomes Zero. The P.V. Factor at 9% are as under:

Year	0	1	2
Factor	1	0.917	0.842

Which factor is the most sensitive to affect the acceptability of the project?

b) Write short note any two
i) Various types of Margins
ii) Rolling Settlement
iii) Global financial System (GFS)

[10+5+5=20]