[This question paper contains 4 printed pages.]

Sr. No. of Question Paper: 1403 F-7 Your Roll No......

Unique Paper Code : 1091504

Name of the Paper : Corporate Analysis and Valuation

Name of the Course : BMS

Semester : V

Duration: 3 Hours Maximum Marks: 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

- 2. Attempt any five questions.
- 3. All questions carry equal marks.
- 4. If any assumptions are made while answering a question the same must be stated clearly.
- 1. (a) Why do we need levered beta for calculating projected cost of capital?
 - (b) Mr. X invested Rs. 100000 in 10% two year bonds and planned to reinvest the coupons to get a lump sum at the end of the period. What was his realised return if interest rates dropped to 6% after six months and remained unchanged thereafter?
 - (c) A 3 year bond with 10% coupon rate is currently available for Rs. 99. It is callable after 2 years at Rs. 105. What is the yield to call?
- 2. (a) A 15% preference share of XYZ Ltd is priced at 140, and another 13% preference share of ABC Ltd is priced at Rs. 120. Which share will you prefer?
 - (b) A company paid a dividend of Rs. 12 in the previous year. The dividends in the future are expected to grow perpetually at the rate of 8%. Find out the share's price today if the required return is 10%?

- (c) A company paid dividend of Rs 8 per share in the immediately preceding period. Dividend is expected to grow at 2% for one year, then at 15% rate for the next two years, after which it is expected to grow at a 5% rate for ever. What is the fair price of the share if the required return is 10%?
- 3. (a) Explain relative valuation using P/E/G ratio.
 - (b) Rank portfolios on the basis of Sharpe and Treynor.

Portfolio	Return	Standard deviation	Correlation with market
X	20%	15%	0.60
Y	36%	18%	0.75
Z	40%	20%	0.85
Market Index	25%	15%	
T Bill rate	6%		

- (c) Compare the Market Model and Markowitz Model for calculating portfolio risk with 100 securities.
- 4. (a) A risky portfolio is made up of two stocks as follows:

Stock	Weightage	Expected Return %	Standard Deviation %
X	40%	15	10
Y	60%	10	9

Correlation between X and Y = 0.5

Mr. Patel wants a portfolio with 11.5 % return. How much should he invest in X and Y? What is the risk of this new portfolio?

- (b) Explain the Characteristic Line and Security Market Line with equations and diagrams.
- (c) What do you understand by default spread?

- 5. (a) Stock A has an expected return of 7.8% and a beta of 0.7. Stock B has an expected return of 10.2% and a beta of 1.3. The risk-free rate is 5%.
 - (i) What is the market return if returns are as required by the CAPM?
 - (ii) Stock C has a beta of 1.1. What is its required return according to the CAPM?
 - (b) An investor is planning to hold the following portfolio:

Stock	Х	Y
Proportion of funds	30%	70%
Alpha	2%	4%
Beta	1.2	0.8
Unsystematic risk (variance)	16%	9%

If the return on market index is expected to be 10% and its variance is 6%. Calculate portfolio beta, portfolio return and portfolio risk.

- (c) Can total risk be eliminated by adding more and more stocks to a portfolio of stocks?
- 6. (a) Estimate EVA for from the following:

Operating income after tax Rs. 35 lakh

Capital invested Rs. 210 lakh

Debt equity ratio 1:2

Cost of equity 12%

Cost of debt after tax 8%

(b) ABC limited has a beta of 1.2 with debt equity ratio of 10%. It is planning to increase debt equity to 20%. The company has a corporate tax rate of 30%. Calculate the new beta for ABC Ltd.

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- (c) Reinvestment rate plays a major role in forecasting future cash flows. Explain.
- 7. (a) A company has cost of equity of 10% for projects in USA. The company is considering an offshore project in a country where sovereign bonds trade at a premium of 3% above the US treasury bonds. Estimate cost of equity if equities are estimated to be thrice as volatile as bonds in that country.
 - (b) Calculate free cash flow to the firm for ABC Ltd. (Figures are in Rs. lakhs)

Earning before interest, depreciation and taxes	2600
Earning before interest and taxes	2100
Interest	100
Earning before tax	2000
Tax	800
Earning after Tax	1200

Capital expenditure during the year Rs. 500 lakh and increase in working capital Rs. 50 lakhs.

(c) Distinguish between regression beta and fundamental beta.