Roll No. 45341

Total No. of Questions—5] [Total No. of Printed Pages—8

Time Allowed—3 Hours Maximum Marks—100

KLM

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi medium. If a candidate who has not opted for Hindi medium, answers in Hindi, his answers in Hindi will not be valued.

Answer **all** questions.

Wherever appropriate, suitable assumptions should be made by the candidates.

Working notes should form part of the answer.

Marks

1. (a) M/s ABC Ltd. is to acquire a personal computer with modem and a printer. Its price is Rs. 60,000. ABC Ltd. can borrow Rs. 60,000 from a commercial bank at 12% interest per annum to finance the purchase. The principal sum is to be repaid in 5 equal year-end instalments. 12

ABC Ltd. can also have the computer on lease for 5 years.

The firm seeks your advise to know the maximum lease rent payable at each year end. Consider the following additional information :

(i) Interest on bank loan is payable at each year end.

(ii) The full cost of the computer will be written off over the effective life of computer on a straight-line basis. This is allowed for tax purposes.

(iii) At the end of year 5, the computer may be sold for Rs. 1,500 through a second-hand dealer, who will charge 8% commission on the sale proceeds.

(iv) The company's effective tax rate is 30%.

(v) The cost of Capital is 11%.

Mark

Suggest the maximum Annual lease rental for ABC Ltd. :

PV Factor at 11%

1	0.901
2	0.812
3	0.731
4	0.659
5	0.593

(b) A mutual fund made an issue of 10,00,000 units of Rs. 10 each on January 01, 2008. No entry load was charged. It made the following investments :

	Rs.
50,000 Equity shares of Rs. 100 each @ Rs. 160	80,00,000
7% Government Securities	8,00,000
9% Debentures (Unlisted)	5,00,000
10% Debentures (Listed)	5,00,000
	98,00,000

During the year, dividends of Rs, 12,00,000 were received on equity shares. Interest on all types of debt securities was received as and when due. At the end of the year equity shares and 10% debentures are quoted at 175% and 90% respectively. Other investments are at par.

Find out the Net Asset Value (NAV) per unit given that operating expenses paid during the year amounted to Rs. 5,00,000. Also find out the NAV, if the Mutual fund had distributed a dividend of Re. 0.80 per unit during the year to the unit holders.

Marks

2. (a) An investor holds two stocks A and B. An analyst prepared ex-ante probability distribution for the possible Economic scenarios and the conditional returns for two stocks and the market index as shown below : 10

Economic scenario	Probability	Conditional Returns %		
		A	B	Market
Growth	0.40	25	20	18
Stagnation	0.30	10	15	13
Recession	0.30	– 5	– 8	– 3

The risk free rate during the next year is expected to be around 11%. Determine whether the investor should liquidate his holdings in stocks A and B or on the contrary make fresh investments in them. CAPM assumptions are holding true.

(b) What are the limitations of Credit Rating ? 4

(c) Following Financial data are available for PQR Ltd. for the year 2008 : 6

	(Rs. in lakh)
8% debentures	125
10% bonds (2007)	50
Equity shares (Rs. 10 each)	100
Reserves and Surplus	300
Total Assets	600
Assets Turnovers ratio	1.1
Effective interest rate	8%
Effective tax rate	40%
Operating margin	10%
Dividend payout ratio	16.67%
Current market Price of Share	14
Required rate of return of investors	15%

Marks

You are required to :

(i) Draw income statement for the year

(ii) Calculate its sustainable growth rate

(iii) Calculate the fair price of the Company's share using dividend discount model, and

(iv) What is your opinion on investment in the company's share at current price ?

3. (a) Closing values of BSE Sensex from 6th to 17th day of the month of January of the year 200X were as follows : 6

Days	Date	Day	Sensex
1	6	THU	14522
2	7	FRI	14925
3	8	SAT	No Trading
4	9	SUN	No Trading
5	10	MON	15222
6	11	TUE	16000
7	12	WED	16400
8	13	THU	17000
9	14	FRI	No Trading
10	15	SAT	No Trading
11	16	SUN	No Trading
12	17	MON	18000

Marks

Calculate Exponential Moving Average (EMA) of Sensex during the above period. The 30 days simple moving average of Sensex can be assumed as 15,000. The value of exponent for 30 days EMA is 0.062.

Give detailed analysis on the basis of your calculations.

(b) XYZ company has current earnings of Rs. 3 per share with 5,00,000 shares outstanding. The company plans to issue 40,000, 7% convertible preference shares of Rs. 50 each at par. The preference shares are convertible into 2 shares for each preference shares held. The equity share has a current market price of Rs. 21 per share. 8

(i) What is preference shares' conversion value ?

(ii) What is conversion premium ?

(iii) Assuming that total earnings remain the same, calculate the effect of the issue on the basic earning per share (a) before conversion (b) after conversion.

(iv) If profits after tax increases by Rs. 1 million what well be the basic EPS (a) before conversion and (b) on a fully diluted basis ?

(c) What is the impact of GDRs on Indian Capital Market ? 6

4. (a) You have been provided the following Financial data of two companies : 10

	Krishna Ltd.	Rama Ltd.
Earnings after taxes	Rs. 7,00,000	Rs. 10,00,000
Equity shares (outstanding)	Rs. 2,00,000	Rs. 4,00,000
EPS	3.5	2.5
P/E ratio	10 times	14 times
Market price per share	Rs. 35	Rs. 35

Company Rama Ltd. is acquiring the company Krishna Ltd., exchanging its shares on a one-to-one basis for company Krishna Ltd. The exchange ratio is based on the market prices of the shares of the two companies.

Marks

Required :

(i) What will be the EPS subsequent to merger ?

(ii) What is the change in EPS for the shareholders of companies Rama Ltd. and Krishna Ltd. ?

(iii) Determine the market value of the post-merger firm : PE ratio is likely to remain the same.

(iv) Ascertain the profits accounting to shareholders of both the companies.

(b) An investors is considering the purchase of the following Bond : 4

Face value	Rs. 100
Coupon rate	11%
Maturity	3 years

(i) If he wants a yield of 13% what is the maximum price he should be ready to pay for ?

(ii) If the Bond is selling for Rs. 97.60, what would be his yield ?

(c) A firm had been paid dividend at Rs. 2 per share last year. The estimated growth of the dividends from the company is estimated to be 5% p.a. Determine the estimated market price of the equity share if the estimated growth rate of dividends (i) rises to 8%, and (ii) falls to 3%. Also find out the present market price of the share, given that the required rate of return of the equity investors is 15.5%. 6

5. (a) M/s Omega Electronics Ltd. exports airconditioners to Germany by importing all the components from Singapore. The company is exporting 2,400 units at a price of Euro 500 per unit. The cost of imported components is S$ 800 per unit. The fixed cost and other variables cost per unit are Rs. 1,000 and 12

Marks

Rs. 1,500 respectively. The cash flows in Foreign currencies are due in six months. The current exchange rates are as follows :

Rs/Euro	51.50/55
Rs/S$	27.20/25

After six months the exchange rates turn out as follows :

Rs/Euro	52.00/05
Rs/S$	27.70/75

(1) You are required to calculate loss/gain due to transaction exposure

(2) Based on the following additional information calculate the loss/gain due to transaction and operating exposure if the contracted price of airconditioners is Rs. 25,000 :

(i) the current exchange rate changes to

Rs/Euro	51.75/80
Rs/S$	27.10/15

(ii) Price elasticity of demand is estimated to be 1.5

(iii) Payments and receipts are to be settled at the end of six months.

(b) A study by a Mutual fund has revealed the following data in respect of three securities : 8

Security	σ (%)	Correlation with Index, Pm
A	20	0.60
B	18	0.95
C	12	0.75

Marks

The standard deviation of market portfolio (BSE Sensex) is observed to be 15%.

(i) What is the sensitivity of returns of each stock with respect to the market ?

(ii) What are the covariances among the various stocks ?

(iii) What would be the risk of portfolio consisting of all the three stocks equally ?

(iv) What is the beta of the portfolio consisting of equal investment in each stock ?

(v) What is the total, systematic and unsystematic risk of the portfolio in (iv) ?