63

Roll No. ....

Total No. of Questions – 7

Total No. of Printed Pages – 7

Time Allowed – 3 Hours

Maximum Marks – 100

CRP

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 has not opted for Hindi medium, his answers in Hindi will not be valued.

Question No. 1 is compulsory.

Attempt any **five** questions from the remaining **six** questions.

Working notes should form part of the Answer.

Marks

1. (a) **A company passes through three stages : growth, transition and maturity stage.** The growth stage is expected to last for 2 years, while the transition stage lasts for 3 years. During the transition stage the growth rate of dividends changes from 18% to 9%. What would be the rate of dividend at the end of the first year of the transition stage ? 2

(b) M/s X Ltd. has paid a dividend of ₹ 2.5 per share on a face value of ₹ 10 in the financial year ending on 31st March, 2009. The details are as follows : 2

Current market price of share	₹ 60
Growth rate of earnings and dividends	10%
Beta of share	0.75
Average market return	15%
Risk free rate of return	9%

Calculate the intrinsic value of share.

(c) If the market price of the bond is ₹ 95; years to maturity = 6 yrs.; coupon rate = 13% p.a. (paid annually) and issue price is ₹ 100. What is the yield to maturity ? 4

Marks

(d) A convertible bond with a face value of ₹ 1,000 is issued at ₹ 1,350 with a coupon rate of 10.5%. The conversion rate is 14 shares per bond. The current market price of bond and share is ₹ 1,475 and ₹ 80 respectively. What is the premium over conversion value ? 2

4 × 5 = 20

2. (a) P Ltd. is considering take-over of R Ltd. by the exchange of four new shares in P Ltd. for every five shares in R Ltd. The relevant financial details of the two companies prior to merger announcement are as follows :

	P Ltd.	R Ltd.
Profit before Tax (₹ Crore)	15	13.50
No. of Shares (Crore)	25	15
P/E Ratio	12	9
Corporate Tax Rate 30%		

6

You are required to determine :

(i) Market value of both the company.

(ii) Value of original shareholders.

(iii) Price per share after merger.

(iv) Effect on share price of both the company if the Directors of P Ltd. expect their own pre-merger P/E ratio to be applied to the combined earnings. **10**

(b) Red Ltd. is considering a project with the following Cash flows :

(₹)

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

4

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 the NPV becomes zero. The P.V. factor at 9% are as under :

Year	Factor
0	1
1	0.917
2	0.842

Which factor is the most sensitive to affect the acceptability of the project? 6

3. (a) Aeroflot airlines is planning to procure a light commercial aircraft for flying class clients at an investment of ₹ 50 lakhs. The expected cash flow after tax for next three years is as follows :

(₹ in Lakh)

Year 1		Year 2		Year 3	
CFAT	Probability	CFAT	Probability	CFAT	Probability
15	.1	15	.1	18	.2
18	.2	20	.3	22	.5
22	.4	30	.4	35	.2
35	.3	45	.2	50	.1

10

The company wishes to consider all possible risk factors relating to an airline. The company wants to know –

(i) the expected NPV of this proposal assuming independent probability distribution with 6 per cent risk free rate of interest, and

(ii) the possible deviation on expected values. 12

Marks

(b) An importer requests his bank to extend the forward contract for US $ 20,000 which is due for maturity on 30th October, 2010, for a further period of 3 months. He agrees to pay the required margin money for such extension of the contract.

Contracted Rate – US $ 1 = ₹ 42.32

The US Dollar quoted on 30-10-2010 : –

Spot – 41.5000 / 41.5200

3 months' Premium – 0.87% / 0.93%

Margin money for buying and selling rate is 0.075% and 0.20% respectively.

Compute :

(i) The cost to the importer in respect of the extension of the forward contract, and

(ii) The rate of new forward contract. 4

4. An investor has decided to invest ₹ 1,00,000 in the shares of two companies, namely, ABC and XYZ. The projections of returns from the shares of the two companies along with their probabilities are as follows :

Probability	ABC(%)	XYZ(%)
.20	12	16
.25	14	10
.25	–7	28
.30	28	–2

You are required to

(i) Comment on return and risk of investment in individual shares.

(ii) Compare the risk and return of these two shares with a Portfolio of these shares in equal proportions.

(iii) Find out the proportion of each of the above shares to formulate a minimum risk portfolio. 16

Marks

5\. (a) A mutual fund company introduced two schemes i.e. Dividend plan (Plan-D) and Bonus plan (Plan-B). The face value of the unit is ₹ 10. On 1-4-2005 Mr. K invested ₹ 2,00,000 each in Plan-D and Plan-B when the NAV was ₹ 38.20 and ₹ 35.60 respectively. Both the plans matured on 31-3-2010.

Particulars of dividend and bonus declared over the period are as follows :

Date	Dividend %	Bonus Ratio	Net Asset Value (₹) Plan-D	Net Asset Value (₹) Plan-B
30-9-2005	10		39.10	35.60
30-6-2006		1 : 5	41.15	36.25
31-3-2007	15		44.20	33.10
15-9-2008	13		45.05	37.25
30-10-2008		1 : 8	42.70	38.30
27-3-2009	16		44.80	39.10
11-4-2009		1 : 10	40.25	38.90
31-3-2010			40.40	39.70

What is the effective yield per annum in respect of the above two plans ? 10

(b) The earnings per share of a company is ₹ 10 and the rate of capitalisation applicable to it is 10 per cent. The company has three options of paying dividend i.e. (i) 50%, (ii) 75% and (iii) 100%. Calculate the market price of the share as per WALTER's model if it can earn a return of (a) 15, (b) 10 and (c) 5 per cent on its retained earnings. 6

Marks

6. (a) Sensex futures are traded at a multiple of 50. Consider the following quotations of Sensex futures in the 10 trading days during February, 2009 :

Day	High	Low	Closing
4-2-09	3306.4	3290.00	3296.50
5-2-09	3298.00	3262.50	3294.40
6-2-09	3256.20	3227.00	3230.40
7-2-09	3233.00	3201.50	3212.30
10-2-09	3281.50	3256.00	3267.50
11-2-09	3283.50	3260.00	3263.80
12-2-09	3315.00	3286.30	3292.00
14-2-09	3315.00	3257.10	3309.30
17-2-09	3278.00	3249.50	3257.80
18-2-09	3118.00	3091.40	3102.60

Abhishek bought one sensex futures contract on February, 04. The average daily absolute change in the value of contract is ₹ 10,000 and standard deviation of these changes is ₹ 2,000. The maintenance margin is 75% of initial margin.

You are required to determine the daily balances in the margin account and payment on margin calls, if any. 8

(b) The share of Galaxy Ltd. of a face value of ₹ 10 is being quoted at ₹ 24. The company has a plan to make a right issue of one equity share for every four shares currently held at a premium of 40% per share.

You are required to :

(i) Determine the minimum price that can be expected of share after the issue.

(ii) Calculate the theoretical value of the rights alone.

(iii) Show the effect of the right issue on the wealth of a shareholder who has 1500 shares, if

(a) he sells the entire rights, and

(b) he ignores the rights. 8

Marks

7. Attempt any **FOUR** of the following : $4 \times 4 = 16$

(a) What is insider trading practice ?

(b) What are the features of Futures Contract ? 8

(c) Explain briefly the salient features of Foreign Currency Convertible Bonds.

(d) What is reverse merger ?

(e) What are the guidelines of Public Investment Board for project appraisal ?