Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/MBA(OLD)/SEM(3FT & 5th PT)/FM-303/2009-10

2009

SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

Time Allotted : 3 Hours *Full Marks* : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10

i) Which of the following is the correct statement ?

a) All financial assets are securities

b) Only listed financial assets are securities

c) Only unlisted financial assets are securities

d) Only mortgaged back assets are securities.

ii) Which of the following is a national level exchange ?

a) Bombay Stock Exchange

b) Calcutta Stock Exchange

c) Delhi Stock Exchange

d) Magadh Stock Exchange.

iii) A year ago, you invested Rs. 20,000 in a savings account that pays an annual interest rate of 6%. What is your approximate annual real rate of return if the rate of inflation was 3% over the year ?

a) 4% b) 10%

c) 7% d) 3%.

iv) Which of the following measures of risk best highlights the potential loss from extreme negative returns ?

a) Standard deviation

b) Variance

c) Upper partial standard deviation

d) Value at Risk (VaR).

v) If a T-bill pays 5 per cent, which of the following investments would not be chosen by a risk-averse investor ?

a) An asset that pays 10 per cent with a probability of 0·60 or 2 per cent with a probability of 0·40

b) An asset that pays 10 per cent with a probability of 0·40 or 2 per cent with a probability of 0·60

c) An asset that pays 10 per cent with a probability of 0·30 or 3·75 per cent with a probability of 0·70

d) An asset that pays 10 per cent with a probability of 0·20 or 3·75 per cent with a probability of 0·80

e) Neither (a) nor (b) would be chosen.

vi) The presence of risk means that

a) more than one outcome is possible

b) investors will lose money

c) the standard deviation of the payoff is larger than its expected value

d) final wealth will be greater than initial wealth.

vii) All things remaining equal, diversification is most effective when

a) securities' returns are positively correlated

b) securities' returns are uncorrelated

c) securities' returns are high

d) securities' returns are negatively correlated.

viii) Portfolio theory as described by Markowitz is most concerned with

a) the elimination of systematic risk

b) the identification of unsystematic risk

c) the effect of diversification on portfolio risk

d) active portfolio management to enhance returns.

ix) Purchasing stock from BSE and selling it on the NSE counter within an hour is an example of

a) Hedging b) Arbitraging

c) Squaring off d) Spotting.

x) The underwriter

a) has to take up the fixed portion of the issue capital

b) has to take up the agreed portion of the unsubscribed part

c) has to take up the agreed portion or can refuse it

d) none of these.

xi) In Private Placement

a) shares are offered through letter of offer

b) shares are offered through prospectus

c) shares are offered through brokers

d) shares are offered through investment bankers.

xii) "Sell Reliance Infrastructure shares at Rs. 200." This order is a

a) Best rate order

b) Limit order

c) Discretionary order

d) Stop loss order.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Two securities have the following risk-return profile :

Security	Return	Variance
A	15%	36%
B	12%	25%

The securities are perfectly negatively correlated. Determine the portfolio that will result in zero risk.

3. What do you mean by liquidity risk ? How is it managed in a financial institution ?

4. Distinguish between semi-strong and strong market efficiency.

5. An investor has a choice of four stocks for investment. Their rates of return & probabilities are given below.

A		**B**		**C**		**D**	
R	P%	R	P%	R	P%	R	P%
– 30	20	– 20	15	– 20	20	– 10	10
0	40	0	35	10	40	0	25
30	30	20	45	40	30	10	40
70	10	40	5	80	10	20	25

a) Are all these stocks attractive investments ? Give reasons.

b) Of those that are attractive, how should the investor choose one to buy ?

6. "Financial Risk is a mixture of danger and opportunity." Explain in brief.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 15 = 45

7. a) i) What is listing ?

ii) Why do companies get their share listed on stock exchange ?

iii) What are the pre-requisites for listing ?

b) The returns on securities *A* and *B* are given below :

Probability	*Security A*	*Security B*
0·5	4	0
0·4	2	3
0·1	0	3

Give the security of your preference. The security has to be selected on the basis of return and risk. 9 + 6

8. Consider the following securities :

Security	**Return (%)**	**Standard Deviation of Return (%)**
A	15	14
B	12	12
C	17	16

$\rho_{AB} = 0 \cdot 11$ $\rho_{BC} = -0 \cdot 11$ $\rho_{AC} = 0 \cdot 21$

Find out the portfolio return and standard deviation for the following portfolios :

i) A : 50%, B : 25%, C : 25%

ii) A : 25%, B : 50%, C : 25%

iii) A : 25%, B : 25%, C : 50%.

Which one has the best risk-return combination ? Why do you say so ? 12 + 3

9. The basic proposal of CAPM may be stated as "Investors do not bother about unsystematic risk because they can eliminate the same through diversification. Their main concern is systematic risk. Thus the excess return they demand must be proportional to systematic risk the asset carries." Explain this by elaborating on the Capital Asset Pricing Model of Sharpe, Linter and Mossin.

10. a) Elucidate with examples the Efficient Market Hypothesis.

b) What are the risks involved in investing in other countries ? 8 + 7

11. Write short notes on any *three* of the following : 3 × 5

a) Sharpe's Single Index Model

b) Credit Rating

c) Bond Portfolio Management

d) Unsystematic Risk

e) Credit Risk Management.