

## Theory Questions

1. Explain the principles of Investment.
2. Briefly explain the concept of Risk and Returns.
3. Write short notes on (i) Systematic Risk (ii) Unsystematic Risk
4. What is Stock Market Indices? Explain about various Stock Markets.
5. Discuss the concept of Time Value of Money.
6. Explain the concept of CAPM.
7. Distinguish between Investment, Speculation & Gambling.
8. How do you measure Beta & Alpha?
9. Explain investment process.
10. Define Portfolio Management. Explain Portfolio Risk & Portfolio Returns
11. What is (i) Standard Deviation (ii) Co-variance (iii) Correlation (iv) Co-efficient of correlation.
12. Discuss the significance of Portfolio Analysis
13. What are the factors affecting investment decisions.
14. Explain Investment Alternatives
15. Bring out various types of Investors.

## PROBLEMS IN INVESTMENT MANAGEMENT

1. An asset has the following possible returns with associated probabilities. Calculate the expected rate of return.

Possible Returns	Probabilities
20%	0.1
18%	0.45
8%	0.30
0%	0.05
-6%	0.10

2. There are two securities P & Q which provides you the following returns and their probabilities.

Security 'P'		Security 'Q'	
Returns	Probability	Returns	Probability
30%	0.10	-20%	0.05
20%	0.20	10%	0.25
10%	0.40	20%	0.30
5%	0.20	30%	0.30
-10%	0.10	40%	0.10

Calculate the expected returns of Security P & Q.

3. Stock ABC & XYZ have the following parameters:

Particulars	Stock ABC	Stock XYZ
Expected Returns	40	60
Expected Variance	36	49
Co-variance	20	

Is there any advantage of holding a combination of these securities?

4. The Evergreen Investment Company manages a stock fund consisting of four stocks with the following market value and betas:

Stock	Market Value (Rs.)	$\beta$
A	2,00,000	1.16
B	1,00,000	1.20
C	1,50,000	0.80
D	50,000	0.50

If the risk free rate is 9% and the market return is 15%, what is the portfolio's expected return?

5. The following information is available:

Expected return for the market – 14%; S.D. of the market return – 20%; Risk-free Return-6%; Correlation co-efficient between Stock A and the market = 0.70, Stock B =0.80; S.D. of Stock A = 24% & S.D. of Stock B = 32%.

- 1) Calculate the Beta for stocks – A & B
- 2) Calculate the required rate of return for each stock.

6. Monthly returns for Company X whose stock and NSE for a period of 6-month period are furnished below:

Month	Company X	NSE
Jan	-0.75	-0.45
Feb	5.40	-0.52
Mar	-3.55	-1.08
Apr	3.41	1.64
May	9.25	6.67
June	2.36	1.21

You are required to calculate Alpha and Beta.

7. The following are the Annual Returns of a company over the past 5 years. Determine the Average Returns and the Standard Deviation over the past 5 years.

Year	Returns
1	4%
2	5%
3	10%
4	3%
5	7.5%

8. Standard Deviation of Stock 'X' – 12%; S.D. of Market Portfolio – 10%; Co-efficient of correlation between the return of the security and the market portfolio – 0.9. Ascertain Beta Co-efficient.

9. From the below given information, calculate as to which stocks are Overvalued or Undervalued.

Security/Stock	Expected $\beta$	E (R)
L	1.12	12%
M	0.60	18%
N	0.50	24%

10. Mr. Malpani is planning to invest in the stock of 'UVX' Co Ltd., He expects the company to earn a return of 20%. Risk free return is 8%, Market return is 25% with a beta coefficient of the security is 0.50%. Should he invest in UVX Ltd.,
11. ZYX has 4,000 shares and among that, Promoters are holding 750 shares, 1500 shares are available for free trading in the open market, while Government is holding 250 shares. The price of a share is Rs.25/-. Determine the Free Float Market Capitalization and Market Capitalization.
12. Mr. Ashutosh deposits Rs.1,500 at the end of every year for 4 years and the deposit earns a compound interest @ 10% p.a. Determine how much money he will have at the end of 4 years?
13. If you deposit Rs.6,000 today @ 8% of interest, in how many years will this amount double according to Rule of 69 and 72?
14. An Investment Company pays 14% rate of interest and compound it monthly. If Rs.15,000 is deposited initially, how much shall it grow to in 3 years.
15. Calculate the present value of Rs.2,000 received in perpetuity for an indefinite period, taking the discount rate @ 10% p.a.
16. Calculate the Expected Return on Portfolio from the following information.

Security	Amount of Funds Invested	Return %
G	3,00,000	12
H	2,00,000	10
I	1,00,000	15
J	4,00,000	16

17. An Investment Company manages the stock fund consisting of 5 securities with the following Market Value and Beta.

Securities	Market Value	$\beta$
E	1,50,000	1.20
D	1,25,000	1.10
C	50,000	1.40
B	1,00,000	0.80
A	2,00,000	1.20

18. Find the Covariance and Correlation of Stock A & B from the following information.

Year	Return of Stock A (%)	Return of Stock B (%)
2018	20	25
2019	12	10
2020	15	20
2021	-8	-10

19. Given below is the information relating to security P & Q.

States of Nature	Probability of Occurrence	Return (P)	Return (Q)
1	0.2	-10%	15%
2	0.5	5%	5%
3	0.1	20%	10%
4	0.2	6%	-8%

Calculate the following:

1. Expected Return for P & Q
2. Standard Deviation for P & Q
3. Covariance between P & Q
4. Correlation of P & Q

20. (a) Two sets X and Y have the following risk and return.

Covariance between X & Y = -90; S.D. 'X' = 30% ; S.D. 'Y' = 20%; E(R) = 20%; E(R) = 10%.

Determine the Risk and Return for a portfolio with 50% in X and 50% in Y.

(b) The following are the expected risks and return of R & S corporations for the next year.

	R	S
Return	12.5%	14%
S.D.	13%	15%
r	-0.60	

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## 1. Reading Comprehension

Investment Management refers to the handling of Financial Assets and Other Investment including Banking, Budgeting and Tax Services and Duties as well. It is not restricted only to buying and selling them. It includes designing a strategy for acquiring and disposing of portfolio holdings. Investment Management, Money Management, Portfolio Management, Wealth Management can be used interchangeably. There are three concepts of investments, (i) Economic Investment (ii) Financial Investment and (iii) General Investment. The nature of Investment includes viz., Risk, Return, Safety and Security and Liquidity. The significance of Investment arise due to following reasons such as Inflation, Larger Life Expectancy, Income Level, Investment Channels and Contingencies.

Investment refers to a purchase of the securities through a proper analysis, evaluation, and review to earn a stable return. An unplanned, non-scientific and without knowledge of the exact nature of risk. Therefore, Gambling is a major international commercial activity wherein most of these activities are illegal and are heavily controlled or banned. In general, it is a recreational activity. It is buying at a low price and selling at a high price in a short time to make larger capital gains.

Answer the following questions from the above information:

1. Enumerate the characteristics of Investment.
2. What is Gambling?
3. What is referred as Investment Management?
4. Name the three concepts of Investment.
5. What kind of activity is Gambling?
6. What is the nature of speculation activity?

## 2. Reading Comprehension

Mr.Prahlad is a regular investor, who always predicts that the possibility that the return earned on the investment will differ from the expected return. In general, it is said that, risk in investment is the probability that the actual return on investment would be less than the expectations of the investors. Prahlad purchased securities of GENZ Ltd., in the month of Jan 2020, keeping a track on the stock prices continuously. Due to pandemic since February 2020, there was regular fluctuations in the stock market prices. He analysed that the stock market prices are influenced by various socio economic factors like, bank rates, Government Policies, fall in the industrial and agriculture products, which are beyond the control of investors. But still, he continued to take risk and investing at regular intervals. He was expecting a higher return on the investments made, for taking additional risk, known as “Risk Premium”.

Answer the following questions from the above given information.

1. What type of investor is Mr.Prahlad?
2. Define Risk?
3. What did Prahlad analyse on his investments?
4. What are the two types of Risk?
5. What is Risk Premium?
6. What are the factors that are beyond the investment scope of the investors?