

Paper Name: Investment and Risk Management

Semester: 3rd

Assignment Questions

- Q1. Write a note on Tactical Asset Allocation and rebalancing the portfolios.
- Q2. Write a note on diversification vs. asset allocation and portfolio construction.
- Q3. Write a note on benchmarking mutual fund programme.
- Q4. Write a note on tracking error.
- Q5. Differentiate between futures and forwards.
- Q6. Write a note on factors affecting option premium.
- Q7. Write a note on interest rate immunization and rebalancing of bond portfolios.
- Q8. Write a note on risk in bonds. (Interest rate risks, Inflation or purchasing power risks & Default risk)

B.B.E. Internal Examination (3rd Year)

Investment and Risk Management

Max. Marks : 50

Time: 2

Hrs.

NOTE: Attempt any 5 questions. All questions carry equal marks.

Q1. What is efficient frontier in the context of Harry Markowitz model? How is an optimum portfolio selected from efficient portfolios? Explain with diagrams.

Q2. Calculate expected return and risk of the investments X and Y. What will be the returns if the total investment is allocated in the ratio 2:3?

Market condition	Probability	Security A	Security B
Dull	0.2	10	6
Stable	0.5	14	15
Growth	0.3	20	11

Also calculate covariance and correlation coefficient.

Q3. Mr. Sharma wants to invest in a company that has just given a current dividend of Rs5 per share. Dividends are expected to grow at 10% for 5 years, at 8% for next 3 years and 5% thereafter perpetually. Find the intrinsic value of the equity share if the required rate of return of Mr. Sharma is 10%. What is intrinsic value of the share at the end of 8th year? If the actual market price is Rs100, should Mr. Sharma buy this share?

Q4. Explain efficient Market hypothesis and the different forms of market efficiency.

Q5. Mutual fund schemes X, Y and Z are available

Mutual fund	Actual return	Beta	S.D(%)
X	14	0.70	21
Y	26	1.20	30
Z	24	1.15	29

The return on market index is 22% and standard deviation of returns on market index is 25%. The risk free rate is 5%

Calculate

- a. Sharpe's ratio for all the funds and market index and rank them
- b. Treynor's ratio for all the funds and market index and rank them
- c. Jensen's ratio for all the funds and market index and rank them

Q6.a. Differentiate between any 2 of the following:

- i. Systematic and unsystematic risk
- ii. SML and CML
- iii. Open ended and close ended mutual funds

b. What are the various types of investors based on their attitude towards risk?

MCO's

- 1. Risk of two securities with different expected return can be compared with:**
 - a) Coefficient of variation
 - b) Standard deviation of securities
 - c) Variance of Securities
 - d) None of the above

(a)
- 2. A portfolio having two risky securities can be turned risk less if**
 - a) The securities are completely positively correlated
 - b) If the correlation ranges between zero and one
 - c) The securities are completely negatively correlated
 - d) None of the above.

(c)
- 3. Efficient frontier comprises of**
 - a) Portfolios that have negatively correlated securities
 - b) Portfolios that have positively correlated securities
 - c) Inefficient portfolios
 - d) Efficient portfolios

(d)
- 4. Efficient portfolios can be defined as those portfolios which for a given level of risk provides**
 - a) Maximum return
 - b) Average return
 - c) Minimum return
 - d) None of the above

(a)
- 5. Capital market line is:**
 - a) Capital allocation line of a market portfolio
 - b) Capital allocation line of a risk free asset
 - c) Both a and b
 - d) None of the above

(c)

6. CAPM accounts for:

- a) Unsystematic risk
- b) Systematic risk
- c) Both a and b
- d) None of the above

(b)

7. The point of tangency between risk return indifference curves and efficient frontier highlights:

- a) Optimal portfolio
- b) Efficient portfolio
- c) Sub-optimal portfolio
- d) None of the above

(a)

8. A portfolio comprises two securities and the expected return on them is 12% and 16% respectively. Determine return of portfolio if first security constitutes 40% of total portfolio.

- a) 12.4%
- b) 13.4%
- c) 14.4%
- d) 15.4%

(c)

9. Risk on a stock portfolio which cannot be eliminated or reduced by placing it in diversified portfolio is classified as

- a) diversifiable risk
- b) market risk
- c) stock risk
- d) portfolio risk

(b)

10. In the asset portfolio, the number of stocks are increased to

- A. reduce return
- B. reduce average
- C. reduce risk
- D. increase prices

(c)

11. A portfolio consists of all the stocks in a market is classified as

- a) market portfolio
- b) return portfolio
- c) correlated portfolio
- d) diversified portfolio

(a)

12. In the asset portfolio, the number of stocks are increased to

- a) reduce return
- b) reduce average
- c) reduce risk
- d) increase prices

(c)

13. Mostly in financials, the risk of portfolio is smaller than that of asset's

- a) mean
- b) weighted average
- c) mean correlation
- d) negative correlation

(b)

14. Portfolio which consists of perfectly positive correlated assets having no effect of

- a) negativity
- b) positivity
- c) correlation
- d) diversification

(d)

15. In a forward contract the party who commits to sell an asset at a specified date in the future takes a(n) position, and the party who commits to buy an asset at a specified date in the future takes a(n) position.

- (a) risk seeking; risk averse
- (b) open; closed
- (c) closed; open

(d) short; long

(e) long; short

(d)

16. An investment strategy that requires no outlay of an investor's own money to generate positive riskless profits is:

(a) arbitrage

(b) risk seeking

(c) portfolio replicating

(d) beta adjusting

(e) minimum variance

(a)

17. An OTC forward contract is:

(a) an option to call

(b) a forward contract for which the payback is outside the contract period

(c) a customised agreement that is not traded on an exchange

(d) a standardised agreement that is traded on an exchange

(e) a forward contract in which the spot price of the asset at maturity is over the contract forward price

(c)