2004N310 Candidate's Seat No :_____

M.Com HPP (FFS) Semester-2 Examination
CC-9
Security Analysis & Portfolio Mgmt

Time : 2-30 Hours]   April-2024   [Max. Marks : 70

Q.1 Write a detailed note on the Investment Process.   14
OR
Q.1
(A) Discuss different investment avenues available for Investment.   7
(B) Write a note on Alternative Investments.   7

Q.2
(A) 12% Bond carrying par value of ₹ 100 matures after 4 years. The Bond is redeemable at par on maturity. The expected yield to maturity is 14% the present market price is ₹ 80. As an investor would you like to buy or sell it? Explain your reason with reference to whether Bond is undervalued or overvalued?   7

(B) The following figures are collected from the annual report of Tomato Ltd.:

Particulars	₹
Net Profit after tax	12,00,000
10% preference shares	40,00,000
Number of equity shares	1,20,000
Return on Investment	20%
Cost of capital i.e. (k_e)	16%
Dividend payout ratio	60%

Find out the price of an equity share using Walter Model.   7

OR
Q.2
(A) Explain Capital Asset Pricing Model (CAPM).   7
(B) Explain Investment risk and Liquidity risk with reference to Bond Valuation.   7

Q.3 Following information is available in respect of two securities R Ltd. and Q Ltd. and the economic predictions are:

Economic Prediction	Probability	R Ltd. (Return%)	Q Ltd. (Return%)
Growth	0.25	40	25
Normal	0.50	10	20
Decline	0.25	(20)	15

You are required to calculate:
(i) the expected return of security R Ltd. and security Q Ltd.,
(ii) the covariance between the returns of security R Ltd. and security Q Ltd.,
(iii)the standard deviation from the returns on security R Ltd. and security Q Ltd.,

P.T.o

(iv) the coefficient of correlation i.e. r_{RQ} between the returns of security R Ltd. and security Q Ltd.

(v) Portfolio return based on ideal allocation of funds.

(vi) Portfolio risk based on ideal allocation of funds.   **14**

OR

Q.3 Mr. Samar is interested to invest ₹ 18,00,000 in the stock market. He selected two securities Hero Ltd. and Suzu Ltd. for this purpose. The risk return profile of these securities are as follows:

Security	Risk (σ)	Expected Return (ER)
Hero Ltd.	5%	6%
Suzu Ltd.	9%	10%

Co-efficient of correlation between Hero Ltd. and Suzu Ltd. is 0.15.

You are required to calculate the portfolio return of the following portfolios of Hero Ltd. and Suzu Ltd. to be considered by Mr. Samar for his investment.

    (i) 50 percent of the fund in Hero Ltd. and the rest 50 percent in Suzu Ltd.;

    (ii) 100 percent investment in Hero Ltd. only;

    (iii) 75 percent of the fund in Hero Ltd. and the rest 25 percent in Suzu Ltd.; and

    (iv) 100 percent investment in Suzu Ltd. only.   **14**

Also indicate that which portfolio is the best for him?

Q.4 The following is the information related to Star Mutual Funds Ltd. during last 3 years:

Mutual Funds Scheme	Average annual return	Standard deviation	Correlation with market
Infra Fund	24	28	0.80
Power Fund	26.5	27	0.65
Banking Fund	33	30	0.85

Further details are:

    (i) Market rate of return 15%

    (ii) Market risk   14%

    (iii) Risk free rate   6%

From the above details, you are required to rank these portfolios using:

    a) Jenson Alpha,

    b) Fama's Net Sensitivity,

    c) Treynor Index method and   **14**

    d) Sharpe Index method.

OR

Q.4

(A) Following are the details relate to the stock Jana Bank Ltd. and Market index:

Year	Jana Bank Ltd. Price (in ₹)	Market Index
2022-23	60	20,000
2023-24	75	22,000

Assume that the risk-free rate of return is 6% and the return on market index is 16%.
Answer the followings:
  (i) Calculate the beta of security (βs) under the "Rise over Run" method.
  (ii) Calculate the expected return on the security on the basis of beta value.   7

(B) The following portfolio details of a Queen Mutual fund are available as on 31-03-2024:

Stock	Shares	Price (₹)
PQ Auto Ltd.	4,000	70
AB Bank Ltd.	6,000	80
EQ Power Ltd.	8,000	40
RS Metal Ltd.	12,000	50

Further Details are:
  (i) There are 80,000 units outstanding.
  (ii) The fund has accrued management fees with the portfolio manager totalling ₹ 30,000.
  (i) The fund has bank balance of ₹ 60,000 and dividend receivable of ₹ 10,000
     Calculate the NAV of the fund?   7

Q.5   Select the appropriate alternative: (Attempt any Seven out of Given)   14

  (1) Two factors model is also known as:
      (a)CAPM (Capital Asset Pricing Model)
      (b)APT (Arbitrage Pricing Theory)
      (c)Markowitz theory
      (d)Black-Scholes Model.

  (2) For perfectly negatively correlated portfolio, r =_____:
      (a) +1
      (b) -1
      (c) +0.10
      (d) -0.10

  (3) If the covariance between the returns on security P and security Q i.e. COV$_{AB}$ is 48
      and the standard deviation of returns on P and Q are 12 and 5 respectively, then the
      value of r$_{PQ}$ will be one of the following:
      (a) -0.8
      (b) -1
      (c) -4
      (d) + 0.8

  (4) If Beta is less than 1, security is_____
      (a) Defensive
      (b) Aggressive
      (c) Neutral
      (d) None of Above

  (5) Treynor Index considers:

(a) Standard Deviation
(b) Beta
(c) Gama
(d) None of these

(6) Systematic risk is also known as_____.
    (a) Low risk
    (b) Unique risk
    (c) Expected Risk
    (d) Non- diversifiable risk

(7) CML is known as_____ return.
    (a) Capital Market Line
    (b) Capital Minimum
    (c) Capital Maximum
    (d) None of the above

(8) One of the following is the value of coefficient of correlation between the security return and market portfolio return, i.e. r_{SM}
    (a) -1
    (b) +10
    (c) +30
    (d) -60

(9) Beta measures_____.
    (a) Systematic risk
    (b) Unsystematic risk
    (c) Both Systematic and Unsystematic risk
    (d) None of the above

(10) NFO stands for _____.
    (a) News for Offer
    (b) New Fund Offer
    (c) New Fact Offer
    (d) None of the above

(11) NAV changes with change in _____.
    (a) Market value of fund portfolio
    (b) Entry of the investor
    (c) Exit of the investor
    (d) None of the above

(12) The beta value of a particular security (i.e. β_s) is 1.5. If the market portfolio return is 22.5% and the risk-free return is 7.5% then the expected return on this security under CAPM will be one of the following:
    (a) 10%
    (b) 25%
    (c) 30%
    (d) 35%