

**M.Com HPP (AAA) Semester-2 Examination****CC-9****Investment Mgmt****April-2024****Time : 2-30 Hours]****[Max. Marks : 70****Q.1****(A)** Discuss the benefits of mutual funds.

7

**(B)** Differentiate between Investment and speculation.

7

**OR****Q.1** Define Investment. Discuss steps involved in the Investment Process.

14

**Q.2****(A)** Differentiate between Systematic risk and Unsystematic risk.

7

**(B)** Explain Efficient Market Hypothesis.

7

**OR****Q.2****(A)** The following figures are collected from the annual report of Zampa Ltd.:

Particulars	₹
Net Profit	6,00,000
12% preference shares	20,00,000
No. of equity shares	60,000
Return on Investment	20%
Cost of capital i.e. ( $k_e$ )	16%
Retention ratio	40%

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

7

**(B)** 11% Bond carrying par value of ₹ 100 matures after 5 years. The bond is redeemable at par on maturity. The expected yield to maturity is 15% the present market price is ₹ 82. As an investor would you like to buy or sell it? Explain your reason with reference to whether Bond is undervalued or overvalued?

7

**Q.3** Mr. Hari is interested to invest ₹ 5,00,000 in the stock market. He selected two securities Lemon Ltd. and Ginger Ltd. for this purpose. The risk return profile of these securities are as follows:

Security	Risk ( $\sigma$ )	Expected Return (ER)
Lemon Ltd.	20%	24%
Ginger Ltd.	36%	40%

Co-efficient of correlation between Lemon Ltd. and Ginger Ltd. is 0.15.

You are required to calculate the portfolio return of the following portfolios of Lemon Ltd. and Ginger Ltd. to be considered by Mr. Hari for his investment.

- 50 percent of the fund in Lemon Ltd. and the rest 50 percent in Ginger Ltd.;
- 100 percent investment in Lemon Ltd. only;

- (iii) 75 percent of the fund in Lemon Ltd. and the rest 25 percent in Ginger Ltd.; and  
 (iv) 100 percent investment in Ginger Ltd. only.
- Also indicate that which portfolio is the best for him?

14

OR

**Q.3**

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

Economic Prediction	Probability	P Ltd. (Return%)	Q Ltd. (Return%)
Bearish	0.25	15	(20)
Normal	0.50	20	10
Bullish	0.25	25	40

You are required to calculate:

- the expected return of security P Ltd. and security Q Ltd.,
- the covariance between the returns of security P Ltd. and security Q Ltd.,
- the standard deviation from the returns on security P Ltd. and security Q Ltd.,
- the coefficient of correlation i.e.  $r_{PQ}$  between the returns of security P Ltd. and security Q Ltd.
- Portfolio return based on ideal allocation of funds.
- Portfolio risk based on ideal allocation of funds.

14

**Q.4**

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

Stock	Shares	Price (₹)
Magnum Ltd.	2,000	35
Energy Ltd.	3,000	40
Power Ltd.	4,000	20
Dimond Ltd.	6,000	25

Further Details:

- The fund has accrued management fees with the portfolio manager totalling ₹ 15,000.
- The fund has bank balance of ₹ 30,000 and dividend receivable of ₹ 5,000
- There are 40,000 units outstanding. What is the NAV of the fund?

7

(B) Following details relate to the stock Suzuki Ltd.'s price and Market index are as under:

Year	Security Price (in ₹)	Market Index
2022-23	4,000	50,000
2023-24	5,000	55,000

Assume that the risk-free rate of return is 6.5% and the return on market index is 16.5%.  
 Answer the followings:

- Calculate the beta of security ( $\beta_s$ ) under the "Rise over Run" method.
- Calculate the expected return on the security on the basis of beta value.

7

OR

**Q.4** The following is the information related to Four Mutual Funds during last 3 years of Ratnam Mutual Fund Ltd.:

Mutual Funds	Average annual return	Standard deviation	Correlation with market
Large Cap	18	16	0.65
Mid Cap	20	18	0.75
Small Cap	24	19	0.85
Flexi Cap	25	17	0.80

Further details are:

- (i) Market rate of return 14%
- (ii) Market risk 13%
- (iii) Risk free rate 5%

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

- a) Sharpe Index method,
- b) Treynor Index method and
- c) Jenson Alpha

14

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

14

(1) One factor 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 positively correlated portfolio,  $r = \underline{\hspace{2cm}}$ :

- (a) +1
- (b) -1
- (c) +0.10
- (d) -0.10

(3) If the covariance between the returns on security A and security B i.e.  $COV_{AB}$  is -24 and the standard deviation of returns on A and B are 6 and 5 respectively, then the value of  $r_{AB}$  will be one of the following:

- (a) -0.8
- (b) -1
- (c) -4
- (d) + 0.8

(4) If Beta is equal to 1, security is \_\_\_\_\_

- (a) Defensive
- (b) Aggressive
- (c) Neutral
- (d) None of Above

(5) Sharpe Index considers:

- (a) Standard Deviation
  - (b) Beta
  - (c) Gama
  - (d) None of these
- (6) Unsystematic risk is also known as \_\_\_\_.
- (a) Market risk
  - (b) Unique risk
  - (c) Expected Risk
  - (d) Diversifiable risk
- (7) Capital Asset Pricing Model return is also known as \_\_\_\_ return.
- (a) CML
  - (b) SLM
  - (c) PERT
  - (d) CAM
- (8) One of the following is not the value of coefficient of correlation between the security return and market portfolio return, i.e.  $r_{SM}$
- (a) -1
  - (b) +1
  - (c) +30
  - (d) 0
- (9) Beta is determined with the help of \_\_\_\_ method.
- (a) Rise over Run
  - (b) Run over Rise
  - (c) Run over Return
  - (d) None of the above
- (10) Mutual funds units \_\_\_\_.
- (a) can be in fraction
  - (b) can never be in fraction
  - (c) always less than 100
  - (d) None of the above
- (11) NAV changes \_\_\_\_.
- (a) Daily
  - (b) Once in a while
  - (c) Never
  - (d) None of the above
- (12) The beta value of a particular security (i.e.  $\beta_s$ ) is 1.5. If the market portfolio return is 7.5% and the risk-free return is 2.5% then the expected return on this security under CAPM will be one of the following:
- (a) 10%
  - (b) 25%
  - (c) 30%
  - (d) 35%