EASTERN UNIVERSITY, SRI LANKA
FACULTY OF COMMERCE AND MANAGEMENT
Final Year First Semester Examination in Bachelor of Commerce Honours in Accounting and Finance - 2021/2022 (February/March 2024) (Proper/Repeat)
DAF 4173 Portfolio Investment Analysis

Answer All Questions **Time Allowed: 03 Hours**

Use of Non Programmable Calculator is permitted.

PART I

Choose an answer.

1. A Portfolio investment refers to
   (a) an investment in a single asset.
   (b) a bundle of investments in many financial assets
   (c) a bundle of investments in many real and financial assets
   (d) a bundle of investments in any type of assets.

2. What is the primary purpose of creating the portfolio investment?
   (a) To maximize the expected return.
   (b) To minimize the risk.
   (c) To diversify the investment risk.
   (d) To maximize the expected return and the risk.

3. Investment environment can be defined as the
   (a) Existing investment vehicles in the market available for investor and the places for transactions with these investment vehicles.
   (b) Investment opportunities available for investor and the process of making transactions with these investments.
   (c) Existing investment vehicles in the market available for investor and the investment management process.
   (d) Investment opportunities available for investor and the investment management process.

4. Which of followings explains correctly the difference between Investment in financial assets and investment in physical assets?
   (a) Financial assets are not divisible, whereas most physical assets are divisible.
   (b) Marketability of financial assets is lower, but physical assets have higher liquidity.
   (c) Information about financial assets is often more abundant and less costly to obtain, than information about physical assets.
   (d) The planned holding period can be much longer for financial assets the than for most physical assets.

5. Which of the following is mostly not a short term investment vehicle?
   (a) Certificates of deposit. (b) Treasury bond. (c) Commercial paper. (d) Repurchase agreements.

6. What is/are the characteristics of speculative investment vehicles?
   A. These investments have a high risk and high return.
   B. Investors' primary concern is with anticipating and profiting from the expected market fluctuations.
   C. The only gain from such investments is the positive difference between selling and purchasing prices.
   D. Return from these investments include dividends and capital gains.
   (a) A only. (b) A and B only. (c) A, B, and C only. (d) All four characters.

7. How can the financial market be categorized based on the sequence of transactions for selling and buying securities?
   (a) Money Market and Capital Market.
   (b) Share Market and Debt Market.
   (c) Primary Market and Secondary Market.
   (d) Internal Market and External Market.

8. What are the characteristics of Investment in Treasury bills out of the followings?
   A. Representing financial obligations of the government.
   B. Having maturity of more than one year.
   C. Being treated as risk-free securities ignoring inflation and default of the issuer.
   D. Treasury bills can be traded before the maturity, while their market price is subject to change with changes in the rate of interest.
   E. The buyer (investor) of Treasury bills is lending money to the issuer, who undertake obligation periodically to pay interest on this and repay the principal at a stated maturity date.
   (a) A,B,C only. (b) A,C,D only. (c) B,C,E only. (d) A,C,E only.

9. Which of the following is not in a five-step procedure of investment management process?

(a) Setting of investment policy.
(b) Analysis and evaluation of investment vehicles.
(c) Formulation of Investment Strategies.
(d) Measurement and evaluation of portfolio performan

10. Which of the following statements are true about the financial market?

A. Financial market determines the prices of assets traded through the interactions between buyers and se having maturity of more than one year.
B. Financial market allows only long term financial instruments to be traded.
C. Financial market provides a liquidity of the financial assets.
D. Financial market facilitates institutions only to raise new funds.
E. Financial market reduces the cost of transactions by reducing explicit costs, such as money spent to adver the desire to buy or to sell a financial asset.

(a) B,C,D only. (b) B,D,E only. (c) A,C,E only. (d) A,B,C only.

11. What are the main characteristics of any investment?

(a) Certainty of Return and Liquidity.
(b) Investment Return and Risk.
(c) Uncertainty of Return and Risk.
(d) Marketability and Profitability.

12. Which type of measurement bases are more relevant for making investment decisions?

(a) Simple Average of Past Returns and its dispersion.
(b) Weighted Average of Historical Returns and its dispersion.
(c) Simple Average of Possible Returns and its dispersio
(d) Weighted Averaged Possible Returns and its dispers

13. Investment Risk can be defined as a

(a) Chance that the actual outcome from an investment will be less than the expected outcome.
(b) Chance that the actual outcome from an investment will differ from the expected outcome.
(c) Chance that the actual outcome from an investment will deviate largely from the expected outcome.
(d) Chance that the actual outcome from an investment will slightly be different from the expected outcome.

14. The Expected return of a portfolio is defined as the Weighted Average of the Expected Returns of individual assets i portfolio with the weights being equal to the proportion of investment in each asset. Is it true or false?

(a) True. (b) False. (c) Undecided.

15. The total risk of a portfolio is measured with the standard deviation which is defined as the weighted average of standard deviations of returns of individual assets in the portfolio with the weights being equal to the proportio investment in each asset. Is it true or false?

(a) True. (b) False. (c) Undecided.

16. The Covariance between two assets can be defined as

(a) The product of the standard deviations of both assets times their correlation coefficients.
(b) The product of the standard deviations of both assets times their correlation coefficients and probabilities.
(c) The sum of the product of each deviation of returns of the two assets.
(d) The sum of the product of each standard deviation of returns of the two assets and probabilities.

17. Which of the following statements are true about the portfolio risk and the correlation between the returns of investments?

A. If the returns of two investments are perfectly positively correlated, the portfolio risk will be equal to the weighted of the individual investments.
B. If the returns of two investments are strongly positively correlated, the portfolio risk will be greatly less than weighted risk of the individual investments.
C. If the returns of two investments are weakly positively correlated, the portfolio risk will be slightly less than weighted risk of the individual investments.
D. If the returns of two investments are perfectly negatively correlated, the portfolio risk will be zero.
E. If the returns of two investments are strongly or weakly negatively correlated, the portfolio risk will be considerably than the weighted risk of the individual investments.

(a) A and B. (b) B and C. (c) A, D, and E. (d) All of them.

18. 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) Covariance between the securities.

19. The Markowitz model identifies the efficient set of portfolios, which offers the
(a) Highest return for any given level of risk or the lowest risk for any given level of return.
(b) Least-risk portfolio for a conservative, middle-aged investor.
(c) Long-run approach to wealth accumulation for a young investor.
(d) Risk-free alternative for risk-averse investors.

20. The situation where a risk averse investor prefers a portfolio with the highest Expected Return for a given level of risk or prefer a portfolio with the lowest level of Risk for a given level of Expected Return is termed as
(a) Principle of Dominance.
(b) Efficient Portfolio.
(c) Risk-Return Preference.
(d) Portfolio Opportunity Set.

21. If an investor searches for patterns in security returns by examining various techniques applied to a set of data, this is known as
(a) Fundamental analysis.
(b) Technical analysis.
(c) Data mining.
(d) Random walk theory.

22. What is the essentiality of the Markowitz portfolio theory?
(a) The problem of optimal portfolio selection.
(b) Assumption of non-sensation.
(c) Assumption of risk aversion.
(d) Measurement of return and risk.

23. An investor considers three portfolios, X, Y, and Z. The expected returns of the portfolios are 20%, 18%, and 12% respectively. The risk of the portfolio X, σ_P (%), is 24%, the portfolios of Y and Z have same level of risk, 16% each. As per the Markowitz portfolio theory, what would be the best choice of portfolio for a risk averse investor?
(a) Portfolio X. (b) Portfolio Y. (c) Portfolio Z. (d) Portfolios Y and Z.

24. What is type of risk is taken into the measurement of expected rate of return of a security as per CAPM?
(a) Total Risk. (b) Systematic Risk. (c) Unsystematic Risk. (d) Portfolio Risk.

25. What is the essentiality of Arbitrage Pricing Theory?
(a) Identifying an efficient portfolio.
(b) Measuring expected rate of return of a portfolio investment.
(c) Determining the expected rate of return of an investment based on market portfolio, GDP, Inflation, exchange rate and Interest rate.
(d) Identifying a number of macroeconomic factors influencing the expected return of an asset.

26. What are types of information available for investors trading in the market to create semi strong form of market efficiency?
(a) All known publicly available past information.
(b) All known publicly available past, current, and inferred Information.
(c) Inside information.
(d) All of the above.

27. Which of the following statements are not true about the systematic risk of investments?
A. It arises on account of the economic-wide uncertainties and tendency of individual securities to move together with changes in the market.
B. This part of the risk can be reduced through diversification.
C. A formidable competitor entering the market is an example causing the systematic risk.
D. Investors are exposed to this risk even when they hold well-diversified portfolios of securities.
(a) A and B. (b) B and C. (c) C and D. (d) A and D.

28. The beta of a security is equal to
(a) The covariance between the security and market returns divided by the variance of the market returns.
(b) The covariance between the security and market returns divided by the standard deviation of the market returns.
(c) The variance of the security's returns divided by the covariance between the security and market returns.
(d) The variance of the security's returns divided by the variance of the market returns.

29. Suppose an investor holds a risk-free security (f) of which he has an expected return of 5% and a risky sec (j) with an expected return of 15% and a standard deviation of 6% in equal proportion. What would be portfolio return and the risk respectively?

(a) 10% and 3%. (b) 5% and 0%. (c) 15% and 6%. (d) 10% and 6%.

30. A security has a Beta of 1.7. The return on the market portfolio is 15%. The risk free rate is 5%. What is expected return of the security, according to the CAPM?

(a) 17%. (b) 20%. (c) 22.5%. (d) 22%.

31. The standard deviation of returns (σ_{NSK}) from the investment in the shares of NSK plc is 13% while the market (σ_m) is 6%. The correlation coefficient of returns between the NSK plc and the market is +0.6. What would be bet the share of NSK Plc?

(a) 1.7. (b) 2.25. (c) 1.3. (d) -1.8.

32. An investor is considering investing in a bond currently selling in the market for Rs.1,200. The bond has five years maturity, a Rs.1,000 face value and a 12% coupon rate. The coupon payment is payable bi-annually. The appropri discount rate for the securities of similar risk is 10%. What is the estimated intrinsic value of the bond?

(a) Rs.1,250. (b) Rs.1,077.20. (c) Rs.1,075.80. (d) Rs.1,000.

33. Based on the result of the answer of above question (32), what would be decision of the investor in investing in bond?

(a) The bond is over-priced and he shall buy it.
(b) The bond is over-priced and he shall not buy it.
(c) The bond is under-priced and he shall buy it.
(d) The bond is under-priced and he shall not buy it.

A new investor is engaged in analyzing investment on equity shares of a company in 2024. The company paid a 1 dividend last year for its 10,000 shares of Rs.500 each. The investor expects the company may increase the divide to12% at the end of 2024, and it can pay a dividend of Rs.69 in the following year. After which he expects the divide will grow at the same rate as in the previous year for the indefinite period. The required rate of return for the investor 25%. Answer the following questions based on this scenario.

34. What is the amount of dividend per share paid at the end of the last year (D_0)?

(a) Rs.50. (b) Rs.100. (c) Rs.15. (d) ....

35. What is the amount of dividend per share expected to be paid at the end of the current year (D_1)?

(a) Rs.56 (b) Rs.120 (c) Rs.60. (d) ....

36. What is the growth rate of the dividend on the share of the company for 2024 according to the forecast of investor?

(a) 15% (b) 25% (c) 20% (d) ....

37. What is the intrinsic value of the share of the company if the investor forecasts that the growth rate in 2024 wo constantly prevail in the future years?

(a) Rs.1200 (b) Rs.600 (c) Rs.300 (d) ....

38. What is the growth rate of the dividend on the share of the company for 2025 according to the forecast of investor?

(a) 10% (b) 12% (c) 15% (d) ....

39. What would be the intrinsic value of the share of the company according to the investor's forecast using the stage growth dividend based valuation model.

(a) Rs.552.00 (b) Rs.553.92 (c) Rs.652.25 (d) ....

40. If the shares of the company are currently selling in the market for Rs.550 per share, what would be the decision the investor in investing on it based on his/her forecasting?

(a) The share is over-priced and he shall buy it.
(b) The share is over-priced and he shall not buy it.
(c) The share is under-priced and he shall not buy
(d) The share is under-priced and he shall buy it.

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