## BRIMS- Epmba- Sem II <u>Final Examination</u> Portfolio Management

## Select the most appropriate answer from the alternatives given below

1) Which of the following is an example of systematic risk of stocks?

- a. Company strike
- b. Industrial recession
- c. Unexpected entry of a new competitor in the market
- d. Managerial change
- 2) The Security Market Line shows the relationship between :
  - a. Required rate of return and beta
  - b. Expected rate of return and diversifiable risk
  - c. Required rate of return and unsystematic risk
  - d. Realized rate of return and beta
- 3) The risk aversion of an investor can be measured by
  - a. Risk-free rate of return
  - b. Market rate of return
  - c. The difference between the market rate of return and the risk-free rate of return
  - d. None of the above
- 4) Diversification can eliminate risk if the securities of a portfolio are
  - a. Perfectly positively correlated
  - b. Perfectly negatively correlated
  - c. Weakly positively correlated
  - d. Not correlated
- 5) An investor purchases an 8% bond having a face value of Rs.1000, and maturity of 5 years for Rs.900. A year later he sells it for Rs.960 in the market. The holding period gain of the investor is:
  - a. 8.88%
  - b. 14.00%
  - c. 14.58%
  - d. 15.55%.
- 6) The  $\beta$  (beta) of a risk-free stock is:
  - a. 10
  - b. -1
  - c. 1
  - d. 0

- 7) Which of the following does not contribute to systematic risk?
  - a. Change in the interest rates.
  - b. Change in the level of government spending.
  - c. Emergence of a new competitor.
  - d. Change in the industrial policy.
- 8) Which bonds are known as 'Gilt Edged Securities'?
  - a. Bonds issued by Indian Multi National Companies,
  - b. Bonds issued by Financial Institutions like ICICI, IDBI, HDFC etc.,
  - c. Bonds issued by the Government of India,
  - d. Bonds issued by Foreign Big Corporates like Microsoft, IBM.
- 9) Identify the risks which are not diversifiable
  - a. Emergence of New Competitors
  - b. Inflation
  - c. Change in Government's Industrial Policy
  - d. b and c above.

10) If the return on the Market Portfolio increases 10% and if the beta of a Share 1.6, then theoretically, the return on the share should be

- a. 12%
- b. 14%
- c. 16%
- d. 18%

11) The required rate of return calculated as per Capital Asset Pricing Model (CAPM)

- a. Is the minimum return required by the investor
- b. Is the same as expected rate of return under equilibrium conditions
- c. Depends on returns of market portfolio and risk-free rate of return
- d. All of the above
- 12) An equity share with beta greater than unity would be called
  - a. A defensive stock, because it is expected to decrease more than the market increases
  - b. An aggressive stock, because it is expected to increase more than the market increases
  - c. A defensive stock, because it is expected to increase more than the market decreases
  - d. An aggressive stock, because it is expected to decrease more than the market increases
- 13) The risk aversion of an investor can be measured by
  - a. Risk-free rate of return
  - b. Market rate of return
  - c. Variance of the return from a security
  - d. The difference between the market rate of return and the risk-free rate of return

- 14) A security is said to be aggressive when it
  - a. Has a beta of > 1
  - b. Plots on the upper part of SML
  - c. Gives below average returns
  - d. Both (a) and (b) above
- 15) Diversification can eliminate risk if the securities of a portfolio are
  - a. Perfectly positively correlated
  - b. Perfectly negatively correlated
  - c. Weakly positively correlated
  - d. Weakly negatively correlated
- 16) Which of the following does not contribute to systematic risk?
  - a. Change in the interest rates.
  - b. Change in the level of government spending.
  - c. Emergence of a new competitor.
  - d. Change in the industrial policy.
- 17) Which of the following is an example of systematic risk of stocks?
  - a. Company strike
  - b. Industrial recession
  - c. Unexpected entry of a new competitor in the market
  - d. Bankruptcy of a major supplier
- 18) Risk premium in the CAPM model is represented as :
  - a. β
  - $b. \quad \beta_j \left(R_m R_f\right)$
  - $c. \quad R_{\rm f}$
  - $d. \quad \beta_j \left(R_{\rm f}-R_{\rm m}\right)$

19) The  $\beta$  (beta) of a risk-free stock is :

a.	10
b.	-1
c.	1
d.	0

- 20) The Security Market Line shows the relationship between :
  - a. Required rate of return and beta
  - b. Expected rate of return and diversifiable risk
  - c. Required rate of return and unsystematic risk
  - d. Realized rate of return and beta

- 21) In a portfolio, maximum risk reduction can be achieved if the assets therein are
  - a. positively correlated,
  - b. negatively correlated,
  - c. perfectly negatively correlated,
  - d. Correlationship is immaterial.
- 22) Identify the risks which are not diversifiable
  - a. Emergence of New Competitors,
  - b. Inflation,
  - c. Change in Government's Industrial Policy,
  - d. b and c above.
- 23) Beta is a measure of
  - a. Non-diversifiable Risks,
  - b. Non Market Risks,
  - c. Market Risks,
  - d. a and c.
- 24) If the return on the Market Portfolio increases 10% and if the beta of a Share1.4, then theoretically, the return on the share should be
  - a. 12%,
  - b. 14%,
  - c. 16%,
  - d. 18%,
- 25) If security is below the Security Market Line, then
  - a. The security's Beta is less than 1
  - b. The security's rate of return is more than the return on the market portfolio
  - c. The security is under priced
  - d. The security is over priced
  - 26) If the covariance of returns of a stock and market is 514.92 (%)<sup>2</sup> and standard deviation of the return on the market is 16.25 %, then the Beta of the stock is
    - a. 0.80
    - b. 1.00
    - c. 1.25
    - d. 1.95
  - 27) Which of the following is a specific risk factor?
    - a. Market risk
    - b. Inflation risk
    - c. Interest rate risk
    - d. Financial risk
  - 28) Which of the following statements is true of beta?
    - a. Beta of a security is the slope of the Security Market Line (SML)
    - b. Beta of a security is a measure of the diversifiable risk of a security
    - c. High beta of a security assures high return

- d. Beta of a security is a measure of systematic risk of a security
- 29) If share of a company is purchased for Rs. 5,000 at the beginning of the year and company paid a dividend of Rs. 15 per share for the year, and it is sold at the end of the year at Rs. 6,000, the yield on such an investment is
  - a. 20.30%
  - b. 21.30%
  - c. 21.89%
  - d. 21.95%
- 30) If the covariance of returns of security A and market is (+) 514.92 (%)<sup>2</sup> and variance of market returns is 121(%)<sup>2</sup>, then the Beta of A is
  - a. 1.30 b. 1.41
  - c. 1.47
  - d. 1.53
- 31) <u>Study the following table:</u>

Probability	0.25	0.35	0.25	0.15
Return on ABC (%)	15	18	20	13

The expected return from ABC stock is

- a. 17%
- b. 18%
- c. 19%
- d. 19.76%
- 32) The 182-day annualized T bills rate is 9% p.a., the return on market is 15% p.a. and the beta of stock is 1.5. The required rate of return p.a. from investment in stock B is
  - a. 17%
  - b. 18%
  - c. 19%
  - d. 20%
- 33) The major benefit of diversification is to
  - a. Increase the expected return
  - b. Increase the size of the investment portfolio
  - c. Reduce brokerage commission
  - d. Reduce the expected risk
- 34) If a stock is purchased for Rs.120 per share and held for one year, during which time Rs. 15 per share dividend is paid and the price decreases to Rs.115, the nominal rate of return is
  - a. 6.33 %
  - b. 8.33 %
  - c. 9.33 %
  - d. 10.33 %

35) Consider the following data:

Probability	0.25	0.35	0.20	0.10	0.10
Return (%)	19	12	18	20	24

The expected return is

- a. 15%
- b. 15.15%
- c. 16%
- d. 16.95%
- 36) The risk-free rate of return is 8%; the expected rate of return on market portfolio is 15%. The beta of Ecoboard's equity stock is 1.4. The required rate of return on Ecoboard's equity is
  - a. 15.4%
  - b. 16.8%
  - c. 17.2%
  - d. 17.8%
- 37) If the covariance of returns from a stock and market is  $(+) 221 (\%)^2$  and variance of market returns is  $121(\%)^2$ , then the Beta of the stock is
  - a. 1.62
  - b. 1.82
  - c. 1.92
  - d. 2.00
- 38) If a security generates a cash flow of Rs. 6.25 at the end of a holding period of 1 year, the price of the security at the beginning of 1 year was Rs. 125 and the price of security at the end of 1 year is Rs. 150, then the rate of return from the security is
  - a. 10%
  - b. 15%
  - c. 20%
  - d. 25%
- 39) Following is the probability distribution of rates of return of a stock:

Return (%)	10	15	20	25
Probability	0.20	0.10	0.50	0.20

The expected rate of return from the stock is

a.	12.5%
u.	12.070

- b. 15.8%
- c. 16.6%
- d. 18.5%
- 40) The diversifiable risk includes the risk due to
  - a. Inflation
  - b. Industrial recession or slow down

- c. Natural Calamities
- d. Strike in the company
- 41) Which of the following would reduce the applicability of CAPM?
  - a. Investors having different time horizons for investments
  - b. The presence of high transaction costs in the market
  - c. The influence of taxes on the choice of assets
  - d. All of the above
- 42) If the risk-free rate of return, market return and the required rate of return by the investor are 8%, 15%, 18% respectively, the beta of the corresponding security will be
  - a. Less than one
  - b. One
  - c. 1.429
  - d. More than one
- 43) Following is the probability distribution of rates of return of a stock:

Return (%)	10	12	15	18
Probability	0.20	0.25	0.25	0.30

The expected rate of return from the stock is

- a. 13.41%
- b. 13.70%
- c. 13.75%
- d. 14.15%
- 44) If a security is less risky than the market portfolio, then its beta would be
  - a. Negative
  - b. More than market beta
  - c. Equal to Zero
  - d. Less than 1
- 45) Which of the following types of risk is not systematic risk?
  - a. Credit risk
  - b. Interest rate risk
  - c. Purchasing power risk
  - d. Market risk
- 46) The risk-free rate of return is 6%; the expected rate of return on market portfolio is 12%, expected return on a stock 18%, then the beta of the stock is
  - a. 0.5
  - b. 2
  - c. 1
  - d. 1.2

- 47) The covariance of the return from a stock with the return from the market is 7.40 and the variance of the market portfolio is 4.80. What is the beta of the stock?
  - a. 1.54
  - b. 3.40
  - c. 4.80
  - d. 6.10
- 48) The risk of a portfolio of two securities increases, if there is ------ between their returns.
  - a. Perfect positive correlation
  - b. Perfect negative correlation
  - c. Moderate positive correlation
  - d. Moderate negative correlation
- 49) If  $R_f = 8\%$ , Beta = 1.5,  $R_m = 12\%$ , then the expected rate of return according to CAPM is equal to
  - a. 10%
  - b. 14%
  - c. 18%
  - d. 24%
- 50) Which of the following types of risk is not a diversifiable risk?
  - a. Business risk
  - b. Financial risk
  - c. Credit risk
  - d. Purchasing power risk
- 51) If the return on a stock increases by 8%, when the return on market increases by 12%, then the beta of the stock is
  - a. 0.67
  - b. 0.75
  - c. 0.80
  - d. 1.20
- 52) If a security's return plots above the Security Market Line (SML), it means
  - a. Security is overpriced
  - b. Security is underpriced
  - c. Security's beta is more than one
  - d. Security's beta is less than one
- 53) In booming (share) market, the companies are to be selected with Beta
  - a. Equal to Zero
  - b. Greater than one
  - c. Less than one
  - d. Equal to one

- 54) Which of the following is **not** an assumption of CAPM?
  - a. Capital markets are perfect
  - b. Lending rate is more than borrowing rate
  - c. No individual is capable of affecting market
  - d. Homogenous expectations
- 55) The slope of the Security Market Line (SML) changes with
  - a. Change in risk-free rate of return
  - b. Change in risk attitude of investors
  - c. Change in inflation
  - d. All of the above
- 56) The relationship between Beta of a security and required rate of return is represented by
  - a. Characteristic line
  - b. Security market line
  - c. Capital market line
  - d. All of the above
- 57) Riskiness of a portfolio is a function of
  - a. Proportions invested in the components
  - b. Riskiness of the components
  - c. Correlation of the returns on the component securities
  - d. All of the above
- 58) Which of the following will cause an increase in the required rate of return?
  - a. Decrease in inflation
  - b. Decrease in risk-free rate
  - c. Increase in interest rate
  - d. Decrease in risk aversion
- 59) If the slope of SML=0, which of the following is true?
  - a. Expected rate of return is more than the market return
  - b. Expected return is equal to risk-free rate of return
  - c. Risk-free rate of return is equal to zero
  - d. Expected return shall be beta times of the risk aversion
- 60) Systematic risk of a security is measured by
  - a. Standard deviation
  - b. Variance
  - c. Covariance
  - d. Beta

## <u>Answer Key</u>

<u>Q. No.</u>	Answer	<u>Q. No.</u>	Answer	<u>Q. No.</u>	Answer
1	b	9	d	17	b
2	a	10	с	18	b
3	с	11	d	19	с
4	b	12	b	20	a
5	d	13	d	21	с
6	с	14	a	22	d
7	с	15	b	23	d
8	с	16	с	24	b
25	a	26	d	27	d
28	d	29	a	30	с
31	a	32	b	33	d
34	b	35	d	36	d
37	b	38	d	39	d
40	d	41	d	42	с
43	d	44	d	45	a
46	b	47	a	48	a
49	b	50	d	51	a
52	b	53	b	54	b
55	a	56	b	57	d
58	с	59	b	60	d