



## BRAINWARE UNIVERSITY

### Coursework Examination 2018 – 19 (June 2019)

Programme – Doctor of Philosophy in Management

Course Name – Investment Analysis and Portfolio Management

Course Code – PHD-MIPM04

**Time allotted: 4 Hours**

**Full Marks: 100**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

#### Group –A

1. *Answer the following* 10 x 1 = 10  
Justify following statements or comments.
  - (i) Clearing and settlement operations of NSE are carried out by exchange itself.
  - (ii) Portfolio holding has no advantage if  $r$  is one.
  - (iii) Dow Theory explains buy and sell strategy.
  - (iv) Financial risk is difference between EBIT and EBT.
  - (v) FII's are permitted to invest in listed companies only.
  - (vi) NSC is an instrument of money market.
  - (vii) If interest rate is 12% and inflation rate is 6.8%, then real rate of return is \_\_\_\_\_.
  - (viii) Green shoe option is used for stabilizing price of a new issue in the market.
  - (ix) Buy back share is not included in balance sheet.
  - (x) Fixed price method generates better premium than book building process.

#### Group – B

(Short Answer Type Questions)

6 x 5 = 30

Answer any *six* from the following

2. Write in a shot note on Random walk theory. 5
3. Analyse the idea of price discovery by book building process. 5
4. Consider stock X and stock Y. They have expected return of 25% and 30% respectively. The risk of Stock A is 20% and 25%. If covariance is 20%, explain whether holding of combination is beneficial or not. 5

5. Beta of a security is found to be -1.50. With a risk free rate of 5% and risk premium at 10%, the expected return from the security is -10%. Do you think that there would be any demand for such financial security in the market? 5
6. In a developed stock market, price of share is expected to follow capital asset pricing Model. Two share providing return as per CAPM model have beta value of 1.15 and 1.5 respectively. 5
  - (a) Calculate market return and risk free return of the developed market.
  - (b) Draw CML and show market return and risk free return on the line.
- 7 Insider's trading is prohibited in India - Explain on this statement. 5
- 8 Explain advantages of Sharp index model over Markowitz model. 5
- 9 Duration of bond and actual maturity of bond are equal in a special situation. Highlight it explaining the reasons of its occurrence. 5

**Group – C**

(Long Answer Type Questions)

6 x 10 = 60

Answer any *six* from the following

10. Index return and stock return figures are given 10

Index return	Stock return
0.50	0.30
0.60	0.60
0.50	0.40
0.60	0.50
0.80	0.60
0.50	0.30
0.80	0.70
0.40	0.50
0.70	0.60

Calculate beta value. Ascertain return from stock if market return is 2.

11. Two companies S and C are listed in stock exchange. Past returns from these stocks are varying significantly in past few years depending upon market conditions. Figures are summarized in the following table.

Situation	Probability	Past return (%)	
		S	C
Excellent	0.10	20	15
Good	0.20	15	12
Normal	0.50	12	9
Bad	0.20	-3	-1

Estimate:

- a. Expected return from two stocks 4
- b. Standard deviations. 4
- c. Covariance & coefficient of correlation between the two stocks. 2

12. An investor wants to make one time investment of Rs.100000. He requires the money after two year's. Two bonds are available in the market. 10  
 Bond 1: coupon rate 8%, maturity period 4 years, current yield 10% and market price Rs.925.  
 Bond 2: coupon rate 6%, maturity period one year, current yield 10%. Current price is Rs.975.

13. There are three mutual funds. Following particulars are available. One of the funds will be disposed to get fund. Comment on its selection. 4+6

Funds	Excess average return	Beta value
No.1	7.5	1.05
No.2	10.8	0.96
No.3	11.1	1.12
Market	8.2	1.00

Apply the concept of Jensen's performance index and decide on the appropriate fund for disposal.

14. A share is paying Rs.10 dividend now. It is expected to grow at 15% in next 3 years. Then growth rate will stabilize at 12%. If market rate of return is 10%, calculate value of stock. 10
15. Explain with example, different types of risks associated with investment in Stock and Bond market. 5+5
16. Two portfolios A and B are there. Expected returns are 20% and 25% respectively. Correlation coefficient is 0.40. Risk of A and B are given by the standard deviation 20% and 30% respectively. Risk free return is taken as 8%.  
 (a) Explain best possible ratio of capital allocation.  
 (b) Ascertain risk and return of this portfolio. 4  
 (c) Combine it with risk free stock and show the increase in return with every percentage increase in risk. 4
17. CML combines risky optimum portfolio with a risk free bond. Comment. 10

-----