Q.P. Code : 61342

Birla Institute of Management LIBRARY M.P.

Fourth Semester M.B.A. (Day) Degree Examination,
September/October 2020

(CBCS – 2014-15 onwards)

Management

Paper 4.2.1 – INVESTMENT ANALYSIS AND MANAGEMENT

Time : 3 Hours] *[Max. Marks : 70*

SECTION – A

Answer any **FIVE** of the following questions. Each question carries **5** marks : **(5 × 5 = 25)**

1. Briefly explain the investment environment in India.

2. Define Risk. Distinguish between systematic and unsystematic risk.

3. What are the strategies adopted in Portfolio Revision?

4. Compute the risk return characteristic of an equally weighted portfolio of three securities whose individual risk and return are given in the following table, the correlation between Security A and B is –0.43 and the correlation between Security B and C is 0.21 and the correlation coefficient between Security A and C is –0.62 :

Security	Risk in Percentage	Return in Percentage
A	15	12
B	20	18
C	25	22

5. Sun Rise Company manages two mutual funds. The funds are index Fund and Equity fund. The data below provide the key statistical information :

	Return per cent	*Risk*	*Beta*	*r*
Equity Fund	19	18	1.49	.83
Index Fund	13	16	1.08	.68
Market	14	10	1.0	1.00
R_f	5			

(a) According to Jenson method which fund performs well?

(b) In your opinion, which fund consists more of systematic risk?

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6. Stocks *X* and *Y* display the following returns over the past three years :

Year	*Return*	
	X	*Y*
1994	14	12
1995	16	18
1996	20	15

(a) What is the expected return on portfolio made up of 40 per cent of *X* and 60 per cent of Y?

(b) What is the standard deviation of each stock?

(c) Determine the correlation co-efficient of stock *X* and *Y*.

(d) What is the portfolio risk of a portfolio made up of 40 per cent *X* and 60 per cent *Y*?

7. You have a portfolio that consists of 35% Microsoft stock, 35% Amazon stock and 30% GE stock. Microsoft has a beta of 1, Amazon has a beta of 3.0, and GE has a beta of 0.5. Treasury bills (the risk free asset) currently offer a return of 4% and the expected return on the market is 11.5 %. What return should you expect on your portfolio according to the CAPM?

SECTION – B

Answer any **THREE** of the following questions. Each question carries **10** marks : **(3 × 10 = 30)**

8. Mr. John is a risk cautious person. He is advised by a friend to buy the following stocks in equal proportion and bits of information regarding the stocks are given below :

Company	*β*	Unsystematic risk
A	0.84	5
B	1.27	12
C	1.17	18

The market return variance is 25. What is the portfolio risk according to Sharpe's model?

9. Stocks *X* and *Y* had the following returns over the past 5 years :

Year	*Return*	
	X	*Y*
1995	9	11
1996	-10	–13
1997	15	19

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Year	*Return*	
	X	*Y*
1998	17	21
1999	21	15

Is it advisable to have a combination of both the stock in a portfolio?

10. Explain Dow Theory in detail.

11. Explain Arbitrage pricing theory with suitable examples.

SECTION – C

(Compulsory)

12. Case Study : **(1 × 15 = 15)**

Determine the optimum portfolio from the following data :

Security	Return in %	Beta of Security	Unsystematic Risk
1	15	1	50
2	17	1.5	40
3	12	1	20
4	17	2	10
5	11	1	40
6	11	1.5	30
7	11	2	40
8	7	0.8	16
9	7	1	20
10	5.6	0.6	6

The risk free rate of return is 5% and variance of market is 10%.
