



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Fourth Semester, Master of Business Administration (MBA)

Semester End Examination; August - 2023

Portfolio Management

Time: 3 hrs

Max. Marks: 100

Note: Answer all **FOUR** full questions from **PART - A** and **PART - B** (Case Study) is compulsory.

Q. No.	Questions	Marks	BLs	COs	POs
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PART - A

- 1 a. Evaluate the different options for investment in securities available in investor. 10 L5 CO1 PO1
 b. Summarize the importance of portfolio management. 10 L2 CO1 PO2,4

OR

- 2 a. Elaborate on various sources of risk. 10 L5 CO1 PO5
 b. Following are the price and other details of 3 stocks for the year 2011,
 Calculate the total return as well as the return relative for the 3 stocks

Stocks	Beginning Price	Dividend Paid	Ending Price
A	30	3.4	34
B	72	4.7	69
C	140	4.8	146

10 L5 CO1 PO2

- 3 a. Evaluate the Markowitz. Diversification theory. 10 L3 CO1 PO1,2
 b. The return on 2 securities under 4 state of economy are given below:

Economy	Prob.%	ONGC%	VSNL%
Expansion	30	15	8
Peak	40	10	18
Recession	10	25	16
Trough	20	5	24

10 L4 CO2 PO4

Estimate the expected return of each stock and the portfolio return if amount is invested in both the stock equally.

OR

- 4 a. Assume yourself as a portfolio manager and with the help of the following details determine whether the securities are overpriced and underpriced in terms of the security market line.

Security	Expected Return	Beta	Standard deviation
A	0.33	1.7	0.5
B	0.13	1.4	0.35
C	0.26	1.1	0.4
D	0.12	0.95	0.24
F	0.21	1.05	0.28
F	0.14	0.7	0.18
Nifty Index	0.13	1	0.3
T Bills	0.09	0	0

10 L5 CO2 PO2

- b. Mr. Arjunan received a bonus of Rs. 50000/- from his company. He wants to invest the money in two stocks. After a careful study of the stocks market he selected rock and Reed corporations. The expected return in rock is 14% and standard deviation of return is 22%. The return from the Reed corp is slightly higher being 16% and at the same time the standard deviation of return is also higher being 25%. The correlation coefficient between them is 0.5. Construct a minimum risk portfolio. 10 L6 CO2 PO1,3
- 5 a. Discuss the Passive portfolio management strategy. 10 L5 CO3 PO1
- b. Construct the optimal portfolio using sharpe single index model from the following data:
- i) Risk free rate-5%
 - ii) Market return-20%
 - iii) Market value-10

Security	R_i	$R_i - R_f$	β_i	σ_{ei}^2	$(R_i - R_f) / \beta_i$
1	15	10	1	50	10
2	17	12	1.5	40	8
3	12	7	1	20	7
4	17	12	2	10	6
5	11	6	1	40	6
6	7	2	0.8	16	2.5
7	5.6	0.6	0.6	6	1

10 L6 CO2,3 PO2

OR

- 6 a. Consider the following information for 3 mutual funds A, B, C and market index.

Particulars	Mean return in %	Standard deviation in %	B
A	12	18	1.1
B	10	15	0.9
C	13	20	1.2
Market Index	11	17	1.0

10 L4 CO3 PO1,3

The mean risk free rate was 6%. Calculate TREYNOR measure, SHARPE measure and JENSEN measure for the 3 mutual funds and market index.

- b. Explain any two types of formula plans. 10 L5 CO3 PO2
- 7 a. Discuss step involved in portfolio revision. 10 L4 CO4 PO2,4
- b. Distinguish between Treynor and Sharpe indices of portfolio performance? Which do you recommended? Why? 10 L5 CO4 PO1

OR

- 8 a. Summarize the important points to be considered in the offer document of a mutual fund. 10 L3 CO5 PO2
- b. What do you mean by heuristic biases? Explain any two related to financial investments. 10 L1,4 CO5 PO2

PART - B (Case Study Compulsory)

9. Mr. Vijay is constructing an optimum portfolio. The market return forecast says that it would be 13.5 percent for the next two years with the market variance of 10 percent. The riskless rate of return is 5 percent. The following securities are under review.

Company	σ	β	σ^2
Anil	3.75	0.99	9.35
Avil	0.60	1.27	5.92
Bow	0.41	0.96	9.79
Viril	-0.22	1.21	5.39
Billy	0.45	0.75	4/52

- a. Estimate the expected return for the individual company. 5 L4 CO3 PO4
- b. Construct the optimum portfolio using sharp's single Index Model. 10 L1,4 CO3 PO2
- c. Estimate the portfolio return of the optimum portfolio so constructed. 5 L4 CO3 PO5

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