

## III Semester M.Com. Examination, January 2018 (CBCS)

## COMMERCE

Paper - 3.5 FB: Portfolio Management

Time: 3 Hours Max. Marks: 70

## SECTION - A

Answer any 7 questions. Each question carries two marks:

 $(7 \times 2 = 14)$ 

- 1. a) Distinguish systematic and unsystematic risk.
  - b) What is the impact of perfectly positively correlation between two stocks in a portfolio?
  - c) Define efficient frontier.
  - d) What is semi strong form of market efficiency?
  - e) What are credit default swaps?
  - f) Distinguish close ended and open ended mutual funds.
  - g) Find the number of correlation coefficients in a portfolio consisting 150 stocks.
  - h) What are corner portfolios?
  - i) Distinguish security market line and capital market line.
  - j) The Beta of a security is 3. What does it mean?

## SECTION - B

Answer any four questions. Each question carries 5 marks:

 $(4 \times 5 = 20)$ 

- 2. What are the basic assumptions of CAPM?
- 3. Explain the strong form of market efficiency with empirical evidences.

P.T.O.



4. ABC Ltd., and XYZ Ltd., have the following risk and return status.

 $R_{ABC} - 15\%$  standard deviation ABC = 30%

R<sub>XYZ</sub> - 17% standard deviation XYZ = 25%

 $r_{ABC: XYZ} = 0.50.$ 

Determine the minimum risk portfolio.

5. Stocks Y and Z have the following parameters:

	Stock Y	Stock Z
Expected return	20	30
Expected variance	16	25
Covariance yz	20	

Is there any advantage of holding a combination of yz? Give reasons.

- 6. Define efficient frontiers. Distinguish efficient portfolios and feasible portfolios.
- 7. What are the assumptions of the formula plan?

SECTION-C

Answer any three questions. Each question carries 12 marks:

(3×12=36)

8. A financial analyst is analysing two alternative investments Z and Y. The estimated rates of return and their chances of occurrences for the next year are given below:

Probability of	Rates of return %	
Occurance	Υ	Z
0.20	22	5
0.60	14	15
0.20	-4	25

- a) Find portfolio return with 60% of Y and 40% of Z.
- b) Determine the portfolio risk.
- 9. Explain the different methods of portfolio management.

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- 10. Explain the types of risks associated with bonds.
- Assume you are the portfolio manager with the help of the following details, find out the securities that are overpriced and underpriced in terms of CAPM.

Security	Expected return	Beta (β)	Standard deviation $(\sigma)$
Α	0.33	1.70	0.50
В	0.13	1.40	0.35
C	0.26	1.10	0.40
D	0.12	0.95	0.24
E	0.21	1.05	. 0.28
F	0.14	0.70	0.18
Nifty index	0.13	1.00	0.20
T. Bills	0.09	0	0

12. From the following details, calculate the systematic and unsystematic risks for the companies stocks. If equal amount is allocated to each stock, what would be the portfolio risk?

	Stock X	Stock Y	Sensex
Average return	0.15	0.25	0.06
Variance of the return	6.30	5.86	2.25
Beta	0.71	0.27	-
Correlation coefficient (r <sub>XY</sub> )	-0.424		
Coefficient of determination (r <sup>2</sup> )	0.18		