

M.Com. (Semester - II) Examination, April 2017 COC 204 : SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT (OA-18)

Duration: 3 Hours

Max. Marks: 60

Instructions: 1) This paper consists of nine questions carrying equal marks.

- 2) Question No.1 consists of 5 compulsory questions of 2 marks
- 3) Answer any 5 questions from question 2, 3, 4, 5, 6, 7, 8 and 9.
- 4) Each question carries 10 marks. Figure to right indicate marks.
- 5) Present value tables will be provided on request.
- 1. Answer the following in brief:

(5×2=10)

- a) What do you mean by Arithmetic Average Return?
- b) What is Economic Forecasting?
- c) What is Formula Plans?
- d) A corporate bond at the beginning of the year is ₹90. Price of the bond at the end of the year is ₹ 95.40. Interest received for the year ₹ 13.50. Compute the rate of return?
- e) Consider the following information:

	Share Moon	Share Mars	
Expected Return %	15	20	
Standard Deviation %	10	15	
Covariance %	284 oilette 120		

- i) What is the correlation between the two shares?
- ii) What is the expected return of a portfolio in which Moon and Mars have been combined in equal proportions?
- 2. What is Economic Analysis? State the macroeconomic factors considered for economic analysis.



3. Explain Arbitrage Pricing Theory.

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4. Explain the different types of risks which affect the return and valuation of a security.

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- 5. Maya Ltd. has a 14 percent debenture with a face value of ₹ 100 that matures at par in 15 years. The debenture is callable in five years at ₹ 114. It currently sells for ₹ 105. Calculate each of the following for this debenture.
 - a) Current yield
 - b) Yield to call
 - c) Yield to maturity.

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- 6. Jaya Ltd. currently pays ₹3 per share as annual dividend. Assuming 10 percent required rate of return on shares. Compute the value of shares under each of the following dividend growth rate assumptions:
 - a) Annual rate of growth, zero percent indefinitely.
 - b) Annual constant rate of growth, 5 percent to infinity.
 - c) Annual rate of growth, 5 percent for each of the next 3 years, followed by a constant annual rate of growth of 4 percent in years 4 to infinity.

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7. A study by a mutual fund has revealed the following data in respect of three securities:

Security	Standard Deviation (%)	Correlation with Index 0.60	
Α.	20		
В	0x18	0.95	
С	12	0.75	

The standard deviation of the market portfolio has been observed as 15%.

- a) What is the sensitivity of returns of each stock with respect to the market?
- b) What are the covariance among the various stocks?
- c) What would be the risk of the portfolio consisting of all stocks equally?
- d) What is Beta of the portfolio consisting of equal investment in each stock?

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8. From the following details, determine the securities that are overpriced and those that are underpriced in terms of the Security Market Line.

Security	Actual Return	β	σ
Α	0.33	1.7	0.50
В	0.13	1.4	0.35
С	0.26	1.1	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	0.00	0.00

Also assume that a portfolio is constructed by using equal portions of six stocks and find out the expected return.

9. The following are the data of five mutual funds:

Fund	Return	Standard Deviation	Beta
Α	16	8	1.5
В	12	6	0.90
C	.14	5	1.40
D	18	10	0.75
Е	15	7 120	1.25

What is the Reward to Variability and Reward to Volatility ratio and the ranking if the risk-free rate is 7%?