



M.Com. (Semester – II) Examination, November 2016  
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 each**.
  - 3) Answer **any 5** questions from questions **2, 3, 4, 5, 6, 7, 8 and 9**.
  - 4) **Each** question carries **10** marks. Figures to **right** indicate marks.
  - 5) Present value tables will be provided on **request**.

1. Answer the following in brief : (5x2=10)
  - a) Explain Trend and Trend reversal.
  - b) What is Portfolio revision ?
  - c) What is Holding Period Return ?
  - d) How many inputs are needed for a portfolio analysis involving 60 securities in Sharpe and Markowitz model ?
  - e) The risk free rate of return is 8 percent and the market rate of return 17 percent. Beta's for four share P, Q, R and S are respectively 0.60, 1.00, 1.20 and -0.20. What is the required rate of return on these four shares ?
2. What is Risk ? How does Systematic Risk affect the individual stock return ? 10
3. What is Industry Analysis ? Explain Industry Life Cycle. 10
4. What is an Efficient Market Hypothesis ? Distinguish among the three forms of market efficiency. 10

P.T.O.



5. Stock C and D have yielded the following returns for the past two years :

Years	Return	Percentage
	C	D
2014	12	14
2015	18	12

- a) What is the expected return on a portfolio made up of 60 percent of C and 40 percent of D ?
- b) Find out the standard deviation of each stock.
- c) What is the covariance and co-efficient of correlation between Stock C and D ?
- d) What is the portfolio risk of a portfolio made up of 60 percent of C and 40 percent of D ? 10
6. Find the duration of a 6 percent coupon bond with a face value of ₹ 1,000 making annual interest payments, if it has 5 years until maturity. The bond is redeemable at 5 percent premium at maturity. The market interest rate is currently 8 percent. 10
7. For the first four years, ABC Firm is assumed to grow at a rate of 10 percent. After four years, the growth rate of dividend is assumed to decline linearly to 6 percent. After 7 years, the firm is assumed to grow at a rate of 6 percent infinitely. The next year dividend is ₹ 2 and the required rate of return is 14 percent. Find out the value of the stock. 10
8. a) Ms. April intends to invest in equity shares of a company, the value of which depends upon various parameters, as mentioned below :

Factor	Beta	Expected Value in %	Actual Value in %
GNP	1.20	7.70	7.70
Inflation	1.75	5.50	7.00
Interest rate	1.30	7.75	9.00
Stock Market Index	1.70	10.00	12.00
Industrial Production	1.00	7.00	7.50

If the risk free rate of interest be 9.25%, how much is the return of the share under Arbitrage Pricing Theory ? 5



b) Corporations SAIL and GAIL present the following risk and return data :

$$R_S = 15\% \quad R_G = 17\%$$

$$\sigma_S = 30\% \quad \sigma_G = 25\%$$

$$r_{SG} = 0.5$$

Determine the minimum risk portfolio.

5

9. Moon and Sun are the two mutual funds. Moon has a mean success of 0.15 and Sun has 0.22. The Sun has double the beta of Moon's Fund 1.5. The standard Deviations of Moon and Sun are 15% and 21.43%. The mean return of market index is 12% and its standard deviation is 7. The risk free rate is 8%.

a) Compute the Jensen Index for each fund.

b) Compute the Treynor and Sharpe indices for the funds. Interpret the results. 10