

IV Semester M.Com. Examination, June/July 2011
(New Scheme) (2007-08)
COMMERCE
Paper - F.5 : Portfolio Management

Time : 3 Hours

Max. Marks : 80

SECTION - A

1. Answer any ten of the following questions in about 4 to 6 lines each. Each sub-question carries 2 marks. (2×10=20)
- a) What is a portfolio and why do we have a portfolio ?
 - b) What is beta ? What does it measure ?
 - c) Write the formula for mean portfolio return for a portfolio of three assets (State any assumptions you make).
 - d) Name bond management strategies.
 - e) What is σ_p and what does it measure ?
 - f) What is a 'Collar' ?
 - g) What is a 'protective put' ?
 - h) Compare market risk of developed and emerging economies.
 - i) List the measures to evaluate performance of mutual funds.
 - j) What are 'Samurai Bonds' ?
 - k) What is MSCI EAFE Index ?
 - l) What is α in CAPM ?

SECTION - B

Answer any three of the following (in about a page each in case of theory questions).
Each question carries 5 marks. (5×3=15)

- 2. What is investor life cycle ? Bring out its importance. ✓
- 3. What is personal finance ? What are its components ? ✓

- ✓ 4. Discuss arbitrage pricing theory in brief.
- 5. What is utility indifference curve? Describe its properties in brief.
- 6. Risk free rate of return is 8% p. a. The mean return earned by the market index is 14% p.a. The beta of stock X is 1.25. Investors believe that the stock will provide an expected return of 17% p.a. Is the stock X undervalued, overvalued or rightly valued? Explain your working in brief.

SECTION - C

Answer any three questions from this Section. (in about three pages in case of theory questions) Each question carries 15 marks. (3×15=45)

- ✓ 7. List the steps involved in portfolio management process. Discuss any two of them in detail.
- ✓ 8. Explain the CAPM, bringing out its limitations.
- 9. What is international investing? What are the advantages and challenges of international investing? Discuss.
- 10. Following table describes the return earned by S & P CNX Nifty and a stock drive in the last year.

Return earned by stock drive	Return earned by S & P CNX Nifty
10	12
15	14
18	13
14	10
16	9
16	13
18	14
4	7

Share

- i) Find the beta for the stock drive.
- ii) What is the characteristic line for the stock drive?



11. Following information pertains to three mutual funds and the market index.

Mutual Fund	Mean return (%) p.a.	Standard deviation (%)	Beta
Plasma	12	18	1.1
Endevour	10	15	0.9
Columbia	13	20	1.2
Market index	11	17	1.00

Handwritten note: R. S. Talwar

Mean risk free rate was 6% p.a. Compute the Sharpe, Jensen and Treynor measure and the market index and offer comments.

SECTION - B

Semester M.Com. Examination, July 2012

(New Scheme) (2007-08)

(21=2x7)

COMMERCE

Paper - F.5.11 Portfolio Management

Time: 3 Hours

Max. Marks: 80

Instruction : Answer all the Sections.

SECTION - A

1. Answer any ten of the following sub questions in about 4 to 6 lines each.

Each sub question carries 2 marks.

(2x10=20)

a) Define portfolio management.

b) What is hedging?

c) What is Sharpe's index?

d) What do you mean by efficient frontier?

e) What is personal finance?

f) What is Bond portfolio?

g) What is investor life cycle?

h) What do you mean by security Beta?

i) What do you mean by indifference curve?

j) What is unsystematic risk?

k) What is optimal active portfolio?

l) What do you mean by derivatives?



SECTION - B

Answer any three of the following (in about a page each in case of theory questions).
Each question carries 5 marks.

(5x3=15)

2. What is equity portfolio management? Explain.
3. Explain the emerging opportunities in International fund management.
4. What is Jensen's measure? Explain.
5. Explain portfolio management of funds in insurance companies.
6. Mr. Kumar is having units in a mutual fund for the past three years. He wants to evaluate its performance by comparing it to the market.

	Fund	Market
Return	70.60	41.40
Standard deviation	41.31	19.44
Risk-free rate	2%	2%
β	1.12	-

Handwritten notes and calculations:
 $R_p - R_f = 70.60 - 2 = 68.60$
 $\frac{68.60}{41.31} = 1.66$
 $\frac{68.60}{19.44} = 3.53$

Find out Sharp and Treynor indices.

SECTION - C

Answer any three questions from this Section. (in about three pages in case of theory questions). Each question carries 15 marks.

7. What is Portfolio performance evaluation? Explain various methods of Portfolio performance evaluation.
8. What is Capital Asset Pricing Model? Explain how it is helpful for measurement of portfolio risk.
9. What do you understand by Portfolio revision? Discuss various constraints in portfolio revision.
10. What is efficient market Hypothesis? How is the Markowitz model useful in Portfolio selection?



11. The investment portfolio of a bank is as follows:

Government Bond	Coupon Rate	Purchase Rate CFU Rs. 100 per Bond	Duration (years)
G01 2006	11.68	106.50	3.50
G01 2010	7.55	105.00	6.50
G01 2015	7.38	105.00	7.50
G01 2022	8.35	110.00	8.75
G01 2032	7.95	101.00	13.00

Face value of total investment is Rs. 5 crore in each Government Bond. Calculate actual investment in portfolio.

What is a suitable action to churnout investment portfolio in the following scenario ?

- a) Interest rates are expected to lower by 25 basis points.
- b) Interest rates are expected to raise by 75 basis points.

Dist Do

Also calculate revised duration of investment portfolio in each scenario.

Portfolio evaluation

$$\text{Sharpe's} = \frac{R_p - R_f}{\sigma_p}$$

R_p : return on portfolio

R_f : risk-free return

σ_p : S.D.

$$\text{Treynor's} = \frac{R_p - R_f}{\beta}$$

$$\text{Jensen's} = R_p - \alpha + \beta (R_m - R_f) + R_f$$

①

$$(R_p - R_f) = \alpha + \beta (R_m - R_f)$$

1) Risk return of portfolio

$$R_p = \frac{\omega_A \bar{R}_A + \omega_B \bar{R}_B + \omega_C \bar{R}_C}{\omega_A + \omega_B + \omega_C}$$

risk =

$$\sigma_p^2 = (\omega_A \sigma_A)^2 + (\omega_B \sigma_B)^2 + (\omega_C \sigma_C)^2 + (2 \times \omega_A \omega_B \sigma_A \sigma_B \rho_{AB})$$