

VPM's
DR VN BRIMS, Thane
Programme: MMS (2013-15)
Third Semester Examination October/November 2014

Subject <i>MMS-III Finance</i>	Security Analysis and Portfolio Management (SAPM 03)		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	3	Date	<i>06.11.2014</i>

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q1) 20 Marks (Compulsory)

The monthly returns offered by two stocks A & B over a period of 12 months (Jan 12 to Dec 12) are as given below:

Month - 2012	Rate of return offered by stock A %	Rate of return offered by stock B %
Jan	4.00	5.00
Feb	5.00	8.00
Mar	7.00	7.00
Apr	6.00	9.00
May	6.00	8.00
Jun	4.00	7.00
Jul	6.00	7.00
Aug	7.00	8.00
Sep	8.00	9.00
Oct	8.00	12.00
Nov	6.00	10.00
Dec	5.00	9.00

Calculate the correlation coefficients between the returns of stocks A & B and offer your comments.

The monthly returns offered by two stocks A & B over a period of 12 months (Jan 13 to Dec 13) are as given below:

Month - 2013	Rate of return offered by stock A %	Rate of return offered by stock B %
Jan	4.00	5.00
Feb	5.00	8.00
Mar	7.00	15.00
Apr	6.25	9.00
May	6.25	14.00
Jun	4.00	7.00
Jul	6.25	7.00
Aug	7.00	8.00
Sep	8.00	12.00
Oct	8.00	14.00
Nov	6.25	12.00
Dec	5.00	9.00

Calculate the correlation coefficients between the returns of stocks A & B and offer your comments.

Attempt Any FOUR from the Remaining SIX Questions

Q2) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) Explain Dividend discount models and assumptions of one year holding period model.
 b) Mr. X desires to purchase the equity share of a company from the secondary market. He prefers to hold share for one year and dispose off the share after one year. He expects to get a dividend of Rs.5.00 per share next year and is hopeful of selling the share in the secondary market at a price of Rs.70 after one year. He expects a return of 20% on his investment, considering the level of risk associated with it. Calculate the present value of the share to the investor.
 c) Explain Efficient frontier.

Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) Explain two stage growth model and its assumptions.
 b) The equity shares of a company offer a current dividend of Rs.4.00 per share. The rate of dividend is expected to grow at 6% for the first five years and at 8% per year thereafter. The rate of return required for an investor is 15%. Find the intrinsic value of the equity share.
 c) The equity shares of X Ltd. are currently being sold in the secondary market at Rs.90 per share. Market analyst predicts a year end dividend of Rs.5.20 per share and a constant dividend growth rate of 7% is also predicted in subsequent years.
 i) If an investor buys the equity share at its prevailing price of Rs.90, what is the rate of return expected by the investor?
 ii) if another investor expects a return of 14% p.a. should he buy the share from the secondary market at its current price?

Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) A portfolio has six securities. The table below shows the weight of the securities in the portfolio. The alpha and Beta coefficients of the securities and the residual variance (i.e. variance of residual returns) of the securities are given below. If the market return is 20% and if the variance of the market return is 280, calculate the expected portfolio return and the portfolio variance using Sharpe's Single Index Model.

Security	Weight	Alpha	Beta	Residual Variance
A	0.30	3.00	1.90	260
B	0.15	2.00	1.10	320
C	0.05	1.00	0.90	340
D	0.20	1.25	1.20	420
E	0.10	0.50	0.80	290
F	0.20	1.10	1.30	210
	1.00			

- b) Explain Random Walk theory.
 c) Explain fundamental analysis.

Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) The risk free return is 9% and the expected market return is 21%. The estimated rates of return of eight securities A to H and their respective Beta coefficients are as under:

Security	Estimated ROR (%)	Beta coefficient
A	15	1.15
B	17	1.19
C	23	1.22
D	30	1.75
E	20	1.14
F	18	1.13
G	25	1.21

Using CAPM, identify the securities that are correctly priced, over priced and under priced.

- b) Explain technical analysis.
- c) Explain effects of combining securities.

Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) What is portfolio analysis and what are the stages of portfolio analysis?
- b) Explain efficient market hypothesis.
- c) Explain Capital Market line (CML) and Security Market line (SML).

Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) What is risk and what are the components of risk?
- b) Explain Markowitz portfolio theory
- c) Explain Capital Asset Pricing Model (CAPM)