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Sr. No. of Question Paper : 6069

Your Roll No.....

Unique Paper Code : 248504

Name of the Paper : Investment Management

Name of the Course : B.A. (Hons) Business Economics, 2016

Semester : V

Duration : 3 Hours

Maximum Marks : 75

**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any five questions. All questions carry equal marks.
3. Use of non scientific calculator and Annuity Tables is allowed. If any assumptions are made while attempting a problem, the same must be stated clearly.

1. (a) Draw a typical yield curve. How does the yield curve behave, when the economy is passing through uncertain times ? (5)

(b) A bond with a face value of Rs. 100 has a YTM of 7.5%, its duration is 4.626 years. At present it is available at par. It will be re-priced if there is an increase or decrease in market rate by 2.5%. Find out the new price of Bond in both the situations. (5)

(c) Following information is available in respect of a bond :

Face Value: Rs. 100, Market Value : Rs. 96.48, Coupon : 8%, YTM : 10%,  
Duration : 1.92 years. Compute Modified Duration. If the YTM falls to 9%,  
find out new expected market price. (5)

P.T.O.

2. (a) What do you understand by the random walk theory? Comment on market efficiency which follows random walk? (5)
- (b) Current EPS of a Co. is Rs. 35 which is expected to increase @ 12% p.a. The PE ratio applicable to the Co. is 5. Find out the expected market price of the share 4 years from now. The Co. has just paid a dividend of Rs. 28 which is expected to increase at the same rate as earning. What is the intrinsic value of the share today if required rate of return of investors is 15%. (5)
- (c) The current market price of a share is Rs. 65 and it is expected to be Rs. 90 after 1 year. Dividend expected after 1 year from now is Rs. 2.90. Find out the equity capitalization rate (cost of equity). (5)
3. (a) The following information is available.

	Stock A	Stock B
Expected Return	16%	12%
Standard Deviation	5%	8%
Coefficient of Correlation	.60	

- (i) What is the covariance between stocks A & B. (2)
- (ii) What is the expected return and risk of a portfolio in which A & B have weights of 0.6 & 0.4. (3)
- (b) Following information is available about three securities which constitute the market :

Security	Beta	Expected return	SD
A	0.2	10%	30
B	1.0	18%	40
C	1.7	25%	50

SD of the market index is 25. Find out :

- (i) Covariance between Security A and market index.
- (ii) Segregate the variance of security A into systematic and firm specific components. (5)
- (c) Differentiate between SML and CML. (5)
4. (a) Compare CAPM with Single Index model. (5)
- (b) Which performance measure is applied in the following case :
- (i) When an attempt is made to compare the performance of funds by equalizing the standard deviation of the funds ?
- (ii) A ratio is computed where we divide the alpha of a portfolio by the standard error of unsystematic risk of portfolio ? (5)
- (c) Following information is available for the Portfolio of XYZ mutual fund and also for market Index (MI) :

	XYZ	MI
Expected Return	8.4%	8%
Standard Deviation	3.2%	4%
Beta		0.8
Risk free rate of return (p.a.)		6%
Standard Deviation of unsystematic risk		1.9%

Calculate Sharpe, Treynor, Jensen and Information Ratios for the portfolio. Is the mutual fund a good investment ? (5)

5. (a) Company ABC and XYZ face the following interest rate :

	ABC	XYZ
US dollar (floating rate)	LIBOR + 0.5%	LIBOR + 2.5%
Japanese yen (fixed rate)	2%	2.25%

Assume that XYZ wants to borrow dollars at a floating rate of interest and ABC wants to borrow Japanese yen at a fixed rate of interest. A financial institution is planning to arrange a swap and requires a 75 basis point spread. If the swap is equally attractive to ABC and XYZ, what rate of interest will they end up paying ? (5)

- (b) The following quotes are available for 3 months options in respect of a share currently traded at Rs. 31.

Strike Price	Rs. 30
Call Option	Rs. 3
Put option	Rs. 2

An investor devises a strategy of buying a call and selling the share and a put option. Draw profit/loss profile. What would be the position if the strategy adopted is selling a call and buying the put and the share ? (5)

- (c) Explain Butterfly spread as an option strategy. (5)

6. Attempt any **three** :

- Explain the fund of funds scheme.
- Explain the term structure of interest rates.
- Explain two stage growth models.
- Mean variance framework
- Explain In-the-money, Out-of-the-money and At-the-money option. (5×3=15)