

**Sree Chaitanya Mahavidyalaya**  
**M.Com. (Semester-4) Examination-2021**  
**Security Analysis and Portfolio Management**  
**Paper-COMPDSE07T**

Full Marks: 40

Time: 2 Hours

**Group-A****1. Answer any five questions****5x2=10**

- (a) What do you mean by security analysis?
- (b) What are the sources of unsystematic risk?
- (c) Describe efficient frontier of portfolios.
- (d) What do you mean by market efficiency?
- (e) If a portfolio's expected rate of return is given by  $2.3 + 0.85 \times \text{expected market rate of return}$ , calculate the expected rate of return on portfolio when expected market rate of return is 20%.
- (f) What will be the effect of increase in rate of corporate income tax on the fair value of a share?
- (g) What will be the effect of increase in risk-free rate of interest on the fair value of a share?
- (h) A share of X Ltd is currently selling at Rs. 40. A dividend of Rs. 5 is expected to be received and the share is expected to be sold at Rs. 50, at the end of the year. Calculate the expected rate of return from that share.

**Group-B****Answer any two questions****5x2=10**

2. Give a comparative note between capital market line and security market line.
3. How would you differentiate Arbitrage Pricing Theory from Capital Asset Pricing Model?
4. Given  $\sum XY=2000$  ;  $\sum X=50$  ;  $\sum Y=90$  ;  $\sum X^2=1500$  ;  $n=10$   
Calculate beta.
5. Explain the relationships between EMH (efficient market hypothesis) vs. Fundamental analysis and Technical Analysis?

**Group-C****Answer any two questions****10x2=20**

6. Describe the Sharpe Index Model. How do you interpret the alpha and beta parameters?
7. What are the different forms of market efficiency? Explain the strong form of market efficiency. How would you test such efficiency?

(2+5+3)

8. You are given the following data. You are required to determine which securities are under-priced and which securities are overpriced?

Security:	R	S	T	U	V	Z
Estimated Returns (%)						
	35%	28%	28%	18%	15%	12%
Beta	1.60	1.40	1.10	0.90	0.75	0.6

The risk free return is 8%. The market return is expected to be 20%.

9. Consider the following data for two risk factors and two securities (A and B)

$\lambda_0 = 6.15\%$ ,  $\lambda_1 = 3.25\%$ ,  $\lambda_2 = 4.5\%$

$\beta_1$  of security A = 1.34,  $\beta_2$  of security A = 0.85

$\beta_1$  of security B = 0.24 and  $\beta_2$  of security B = 1.74

Security A is currently selling at Rs. 830 and the estimated year end price of the security is Rs.950.

Security B is currently selling at Rs.160 and estimated year end price of the security is Rs.205.

Using APT (Arbitrage pricing theory) model compute:-

- Compute expected returns from securities A and B
- What are the expected prices of the securities one year from now?
- Evaluate whether securities are correctly priced or not.

**Send your answer scripts to this e-mail**

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