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Post-Graduate Department of Commerce (M. Com)

M.Com Part-II, Semester-IV, Semester End Examination, April 2023

(Accounting and Finance)

COO430: Security Analysis and Portfolio Management (OA - 18A)

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 FIVE** questions from question 2,3,4,5,6,7,8 and 9.

4. **Each** question carries **10 marks**. Figures to the **right** indicate marks.

Q.1. Answer the Following Questions: (5X2=10)

a) How is Investment different from Gambling and Speculation (State any Two Points)

b) Define Risk and its nature in Security Analysis.

c) The Price of Rs.1000 par value bond carrying a coupon rate of 6% and maturing after 5 years is Rs. 1020. Calculate the Approximate Yield to Maturity on the Bond.

d) Describe Markowitz Efficient Frontier.

e) Why is it essential to Evaluate the Performance of a Portfolio.

Q.2. PQR Ltd's Debentres provided the following returns for the last 5 years:

Year	Rate of Return (%)
2018	15
2019	14
2020	15
2021	13

Calculate Average Return, Holding Period Return, Geometric Return and the different parameters of risk Variability in the returns of PQR ltd's Debentures for the period 2018-2022. **(10)**

Q.3. The performance of a Company is also dependent on the performance of the Economy, where some economic factors have a positive impact while the others have an adverse impact on the Company performance. Anticipating such an impact is not always easy as the Economy is also influenced by the element of future uncertainty. In light of this Statement, explain briefly how a company can forecast and analyze the Economic Impact on its Market performance. **(10)**

Q.4.A. Blue Company issues a Rs. 1,000 bond, with a coupon of 8% payable annually. It matures in six years. Calculate Macaulay Duration and Modified Macaulay Duration for the Blue Company Bond. **(6)**

B. Bonds or debentures, are issued by companies and financial institutions as a means of raising money from the markets in the form of loans. Highlight and explain the types of Bonds issued in the market based on their distinctive features. **(4)**

Q.5. Answer the Following Questions:

A. An investor is looking for a four-year investment. The share of Skylark Company is selling for Rs 75. They have plans to pay a dividend of Rs 7.50 per share each at the end of first and second years and Rs 9 and Rs 15 respectively at the end of third and fourth years. If the investor's capitalisation rate is 12 percent and the share's price at the end of fourth year is Rs 70, what is the value of the share? Would it be a desirable investment? **(3)**

B. The Edward Corporation recently paid a dividend of Rs. 4 per share. Dividends have been growing at an annual rate of 8% and this growth rate is expected to continue in the foreseeable future. If the Required rate of return for Edwards stock is 14%, what is its Value? **(2)**

C. The Current dividend on an Equity share of Omex Ltd. is Rs. 5 on an EPS of Rs. Rs. 20. Assume that the dividend will grow at a rate of 18% for the next 4 years. Thereafter, the

growth rate is expected to fall and stabilize at 12%. Equity investors require a return of 15% from Omex's Equity share. What is the Intrinsic Value of Omex's Equity Share? **(5)**

Q.6. The following information is available about the stocks of two companies X and Y:

Stock A

Expected Return (%)	Probability
-10	0.10
15	0.35
20	0.30
25	0.25

Stock B

Expected Return (%)	Probability
10	0.15
20	0.20
25	0.30
30	0.35

The coefficient of correlation between the returns on X and Y is 0.05. A portfolio is constructed by allocating the funds between X and Y in the ratio of 2:3.

You are required to calculate:

a. The expected return on the portfolio.

b. The portfolio risk. **(10)**

Q.7.A. The following is the information regarding the stocks of four companies:

Stock	Expected return	Beta
Gamma	12%	1.10
Delta	14%	0.80
Epsilon	16%	1.05
Kappa	18%	1.15

If the return from gilt-edged securities is 5% and market index is 15%, you are required to:

a. Identify the undervalued and overvalued securities.

b. Suggest which securities should be bought and which securities should be sold. (5)

B. The following details are given for Sun and East Companies stocks and the Nifty 50 for a period of one year. Calculate the systematic and unsystematic risk for the Companies stocks.

	Sun Stock	East Stock	Nifty 50
Average Return	0.15	0.25	0.06
Variance of Return	6.30	5.86	2.25
Beta	0.71	0.685	
Correlation Coefficient	0.424		
Coefficient of Determination	0.18		

(5)

Q.8. An Investor has gathered the following information about Five Mutual Funds, Namely, A,B,C,D and E:

Mutual Funds	Return (%)	Std. Deviation (%)	Beta
A	15	5	1.5
B	10	4	0.5
C	17	7	1
D	11	6	0.7
E	19	5	1.3

Return on risk-free asset is 5% and on market is 18%. Evaluate and Rank these Mutual Funds using Sharpe's ratio, Treynor's ratio and Jensen's Alpha. (10)

Q.9. Formula Plans provide the basic rules for the purchase and sale of securities in a portfolio. What are the assumptions of Formula Plans and discuss briefly the types of Formula Plans as per the Investment Objective of Investors. (10)

**********ALL THE BEST**********