

Vidya Vikas Mandal's  
Shree Damodar College of Commerce & Economics, Margao-Goa  
Post-Graduate Department of Commerce  
PGDFT, Semester-II, Semester End Examination, May 2023  
DFTC 202: Security Analysis and Portfolio Management

**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 mark 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:

(5 × 2 = 10)

- a) Mr. Rahul Modi has purchased a bond at a price of Rs 3,000, with a coupon payment of Rs 350 and sold at Rs 3,200. What is his holding period return?
- b) Suppose an investor is considering the purchase of a 5-year Rs 5,000 bond bearing a coupon rate of 8% and the current market price of the bond is Rs 4,800, then the investors required rate of return would be?
- c) What is a call option?
- d) What is a future contract?
- e) Briefly explain Relative Strength Index.

Q.2. Describe the following investment avenues in detail.

- a. Monthly Income Scheme;
- b. Mutual Funds;
- c. Public Provident Fund;
- d. G-Securities;
- e. Real Estate.

(10)

Q.3. Write short Notes on:

- Security Analysis as a part of Investment Process.
- Portfolio construction as a part of Investment Process.

(2 x 5 =10)

Q.4. Mr. Natwarlal is presently concerned with the investment of Rs 1,00,000. He has two securities S1 & S2 for this purpose. The relevant information in respect of these two securities is as follows:

	S1	S2
Expected Return	12%	20%
Standard Deviation	10%	18%

Coefficient of Correlation (r) between S1 & S2 is 0.15.

He has decided to consider only 5 portfolios of S1 and S2 as follows:

- All funds invested in S1;
- 50% funds invested in each S1 & S2;
- 75% in S1 and 25% in S2;
- 25% in S1 and 75% in S2;
- All funds invested in S2.

Find out:

- Expected return under different portfolios;
- Risk factors associated with these portfolios;
- Which portfolio is best in terms of risk;
- Which portfolio is best in terms of return.

(10)

Q.5. Indian Billionaire, Mr. Mukesh Ambani seeks to invest in Bitcoin and Non-Fungible Tokens. He has certain doubts with respect to investment in crypto currency. You are required to address them with suitable explanations. Following are some of the questions asked by Mr Ambani:

- What is Blockchain?
- How is Blockchain different from Bitcoin?
- Is crypto currency banned in India?

d. What are Non-Fungible Tokens?

e. What do you mean by fungible.

(10)

Q.6. A. Shares of XYZLtd. has the following returns and probabilities. You are Required to calculate Expected Return & Standard Deviation.

Return %	Probability
-40	0.10
-20	0.05
20	0.25
30	0.20
40	0.15
50	0.05
60	0.20

B. Write a short note on systematic risk and unsystematic risk.

(2 x 5 = 10)

Q.7. From the given data you are required to calculate:

- Annual Capital Gain or Loss per share;
- Annual Return per share in Rupees for each year;;
- Annual Return per share as a % of Market Price at the beginning of each year;
- Average 5-year Return per share;
- Standard Deviation.

Year	Dividend	Share Price
2016	15	100
2017	16	95
2018	17	105
2019	18	110
2020	19	100
2021	20	95
2022	21	110

(10)

Q.8. Write a detailed note on Sharpe Ratio with specific focus on how the ratio works, its formula, advantages and the indicators of a good and bad Sharpe Ratio.

(10)

Q.9. Mr. Morgan has to pay Rs 40,000 after 5 years from today. He wants to fund this obligation today. On enquiry he finds out that PFC Ltd has come out with an IPO of 8% Bonds (face value Rs 100) with maturity 6 years. He invests Rs 27,200 in the offer.

- a. Calculate Duration of Bond;
- b. Calculate Modified Duration.

(10)

\*\*\*\*\*Best Wishes\*\*\*\*\*