

P P SAVANI UNIVERSITY

Third Semester of MBA Examination

December 2022

SLMB8380 Security Analysis and Portfolio Management

24.12.2022, Saturday

Time: 09:00 a.m. To 11:30 a.m.

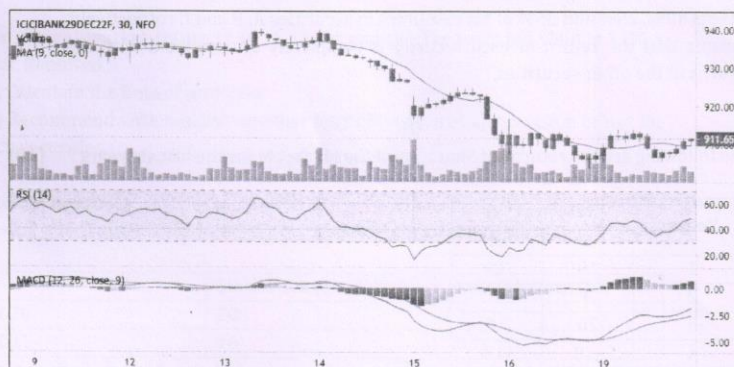
Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is not allowed.

SECTION - I

- Q - 1 Answer the following : [05] CO BTL
- | | | |
|---|---|---|
| (i) What is portfolio ? | 1 | 2 |
| (ii) What is Risk Vs. Return trade off ? | 1 | 2 |
| (iii) How do you measure Risk ? | 1 | 2 |
| (iv) What is Fundamental Analysis ? | 1 | 2 |
| (v) What is the Efficient Market Hypothesis ? | 1 | 2 |
- Q - 2 Elaborate different types of Portfolio Management Services. [10] 3 4
- OR**
- Q - 2 (a) Mr. IRDA subscribed shares of LIC at a price of ₹ 900 (after retail category discount of ₹ 50). Company paid dividend of ₹ 90 after one year. Compute the return on investment if the share price goes to ₹ 1000. Would your answer be different if shares have been subscribed at ₹ 950 (without retail category discount) ? [05] 2 5
- Q - 2 (b) Two investors follow two different approaches of investment. Mr. Standard invests high return category of shares while Mr. Poor invests after looking at return and standard deviation of the share. What does standard deviation stand for ? Which approach will you follow while making investment? Elaborate with reason. [05] 2 5
- Q - 3 Being a technical Analyst, interpret the following chart in terms of : [10] 3 6
- (a) MACD
 - (b) RSI
 - (c) Moving Averages



OR

- Q - 3 Mr. Musk is planning to buy Twitter Inc. and approached Goldman Sachs for valuation of the company. Twitter inc. currently paid Dividend of \$ 2 per share. Previous Goldman Sachs report suggests that the company is expected to grow at 4% p.a. for next three years then at 6% p.a. for another three years and then 8% p.a. forever. Being the first point employee of Goldman Sachs, you need to present the valuation of share price of Twitter Inc. to Mr. Musk assuming Mr. Musk expects 8 % as his required rate of Return. If the price quoted by shareholder of Twitter Inc. is \$ 43, is it worth to buy ? Advice. [10] 3 5
- Q - 4 Attempt any one : [05]
- (i) Screen based trading System 1 2
- (ii) Open Interest 1 3

SECTION - II

- Q - 1 Answer the following questions. [05]
- (i) What is CAPM ? 1 2
- (ii) Why do you revise portfolio ? 1 2
- (iii) What to do with undervalued securities ? 1 2
- (iv) How does Sharpe's single Index model is different from CAPM ? 1 2
- (v) What is Arbitrage ? 1 2
- Q - 2 Mr. Z owns three securities and has estimated the following joint probability distribution of returns (in percentage): [10] 3 5

Possible Outcomes	Security A (%)	Security B (%)	Security C (%)	Probability
1	30	-24	0	0.20
2	24	-4	20	0.10
3	10	0	24	0.20
4	-6	8	30	0.30
5	-16	20	14	0.10
6	12	10	12	0.10

Calculate the expected return and standard deviation of the portfolio if Mr. Z invests 40%, 25% and 35% of his resources in securities A, B and C respectively. Assume that the return of each security is completely uncorrelated with the returns of the other securities.

OR

- Q - 2 The following are the returns of Share S and the Market M for the last six years : [10] 4 5

Years	Returns (%)	
	S	M
1	18	15
2	9	7
3	20	16
4	-10	-13
5	5	4

6	12	7
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- (a) Calculate the covariance and correlation coefficient of returns.
 (b) Determine the beta coefficient for security S.
 (c) What is the security S's total risk? How much is the systematic risk.

Q - 3

[10] 4 5

Securities	Expected Return	Beta	Standard Deviation
Blue	0.32	1.70	0.50
White	0.30	1.40	0.35
Red	0.25	1.10	0.40
Grey	0.22	0.95	0.24
Black	0.20	1.05	0.28
Brown	0.14	0.70	0.18
S&P 500	0.12	1.00	0.20
T bills	0.08	0	0

Assuming all securities are having equal weight in the portfolio,
 Compute :

- (1) Beta of the portfolio
 (2) Systematic, Unsystematic and Total Risk of the portfolio.

OR

Q - 3

Details of the portfolio which consists of shares in the four UK listed companies are as follows :

[10] 4 5

Companies	No. of Shares Held	Beta coefficient	Market Price per share	Return expected in next year (%)
Dashing plc	60,000	1.16	4.29	19.5
Elegant plc	80,000	1.28	2.92	24
Fantastic plc	1,00,000	0.90	2.17	7.5
Gaudy plc	1,25,000	1.50	3.14	23

The current market return is 19 % a year and the Treasury bill yield is 11% a year. Required :

- (a) Calculate the Beta of portfolio.
 (b) Recommend with reasons whether portfolio requires any revision or not for each securities.

Q - 4

Attempt any one :

[05]

(1)

Stock P and Q display the following returns over the past two years :

3 4

	Stock P Return (%)	Stock Q Return (%)
2020	10	12
2021	16	18

What is the expected risk and return of the portfolio made up of 40% P and

- (2) 60% Q.
Securities in a portfolio should be uncorrelated to get maximum return - 2 4
Elaborate the statement with examples.

CO : Course Outcome Number BTL : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create