



**M.Com. II Semester (CBCS) Degree Examination,
September/October - 2022**

COMMERCE

21COM2C8L : Security Analysis and Portfolio Management

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions with Question No.1 is **Compulsory**. Each question carries **equal** marks.

1. (a) What is Investment ? Discuss the investment process. 7
 (b) A Stock costing ₹ 250 pays no dividends. The possible prices that the stock might sell for at the end of the year and the probability of each are : 7

Possible Prices (₹)	Probability
2000	0.10
2300	0.25
2500	0.35
2800	0.20
3100	0.10

2. (a) “An investor cannot consistently earn excess returns by undertaking fundamental analysis or technical analysis”. Discuss 7
 (b) Explain the basic principles and hypotheses of Dow Theory. 7
3. (a) Write an elaborative note on Harry Markowitz’s Modern Portfolio Theory. 7
 (b) Calculate the portfolio variance and standard deviation for a portfolio having the following characteristics. 7

Securities	Return (%)	Standard Deviation	Proportion of Investment
J	40	12	0.2
K	15	8	0.3
L	50	16	0.5

Correlation Coefficients :

J and K = 0.8 J and L = 0.2 K and L = 0.5



4. (a) What is Arbitrage Pricing theory ? **4**
- (b) The following data are available to you as portfolio manager : **10**

Security	Estimated return(%)	Beta	Standard Deviation (%)
1	32	2.10	50
2	30	1.80	35
3	25	1.65	42
4	20	1.30	26
5	18	1.15	29
6	15	0.85	18
7	14	0.75	20
8	12	0.50	17
Market Index	16	1.00	25
Govt. security	7.5	0	0

- (i) In terms of security market line, which of the securities listed above are undervalued ?
- (ii) Assuming that a portfolio is constructed investing equal proportion of funds in each of the above securities, what is the expected return and risk of such a portfolio ?
5. (a) Discuss the need for performance measurement and evaluation of Portfolio. **7**
- (b) The return on a mutual fund portfolio during the last few years was 16%, when the return on the market portfolio was 18%. The standard deviation of the portfolio return was 14% whereas the standard deviation of the market portfolio return was 16%. The portfolio beta was 1.2. The risk-free rate was 10%. **7**

Decompose the portfolio return into four components as suggested by Fama.



6. The following information relate to Moon Traders Ltd. for the year ended 14 31st Dec, 2022.

Trading and Profit and Loss Account

To Opening stock	75000	By Sales	520000	
To Purchases	325000	Less : Return	20000	500000
To Gross Profit	200000	Closing Stock		100000
	600000			600000
To Operating Expenses		By Gross Profit		200000
Adm Expenses 40000		By Non-operating Income		
Selling Expenses 25000	65000	Dividend		9000
To Non-operating Expenses		Profit on sale of shares 11000		20000
Loss on sale of assets	5000			
To Net Profit	150000			
	2,20,000			2,20,000

Balance Sheet as on 31.12.2022

Liabilities	₹	Assets	₹
Issued Capital : 2000 shares of Rs. 100 each	200000	Land and Building	150000
Reserves	90000	Plant and Machinery	80000
Current Liabilities	150000	Debtors	80000
Profit and Loss A/C	60000	Stock	160000
		Cash	30000
	500000		500000

Calculate :

- | | |
|-------------------------------|----------------------------------|
| (a) G P Ratio | (b) Operating Ratio |
| (c) Operating Profit Ratio | (d) Net Profit Ratio |
| (e) Expenses Ratio | (f) Stock Turnover Ratio |
| (g) Return on total resources | (h) Turnover of Fixed Assets and |
| (i) Turnover of Total Assets | |



7. (a) "Formula plans attempt to make portfolio revision a simple and almost mechanical exercise". Discuss. **7**

(b) Given the following information : **7**

	Portfolio			
	A	B	C	D
Beta	1.10	0.8	1.8	1.4
Return (%)	14.5	11.25	19.75	18.5
Standard Deviation (%)	20.0	17.5	26.3	24.5

Risk free rate of return = 6 percent

Market Return = 12 percent

Calculate

- (i) Sharpe Ratio
- (ii) Treynor Ratio
- (iii) Jensen ratio

8. (a) What is Portfolio Revision ? Discuss the various strategies for portfolio revision. **4**

(b) Write a note on Efficient Market Hypothesis. **5**

(c) Security J has a beta of 0.75 while security K has a beta of 1.45. Calculate the expected return for these securities as per CAPM, assuming that the risk free rate is 5 percent and the expected return of the market is 14 percent. **5**

