A/61

2104E252

Candidate's Seat No :_____

M.B.A. (GM-FM) Sem.-4 Examination

LS-402

IA & PM

Time : 2-30 Hours] **April-2025** **[Max. Marks : 70**

Q-1	A) How do the following investments compare in terms of return, risk, marketability, tax shelter, and convenience: equity shares, bank deposits, public provident fund, residential house, and gold? B) Briefly describe the primary market and the secondary market for G-secs in India.	**07** **07**
Q-2	A) From the following information prepare summarize balance sheet as at 31 March 2024.	**14**

Current Ratio	1.75
Liquid Ratio	1.25
Stock turnover ratio (Cost of Sales/Closing Stock)	9
Gross Profit Ratio	0.25
Debt collection period	1.5 months
Reserves & Surplus in Capital	0.2
Turnover to fixed assets (COGS/FA)	1.2
Capital gearing ratio	0.5
Fixed assets to net worth	1.25
Sales for the year	Rs. 12,00,000

Note: COGS means cost of goods sold, and FA means Fixed asset.

OR

A) Viso Ltd. plans to expand its operations and estimates the total cost for the expansion to be Rs. 24 Crore. The same is proposed to be financed by internal accruals of Rs.9 and the balance through a rights issue. The current share capital of the company is Rs.2.40 Crores. The shares of the company are currently quoting at RS. 345. The company proposes to price the rights at Rs. 250 **07**

Based on the information

a. Compute the ratio of the rights.
b. Calculate the value of the rights.
c. Determine the gain/Loss of a shareholder, if he
   - Exercises his rights in the right issue
   - Allows his rights to expire
   - Sells his rights.

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E 252-2

B) The issued capital of Indiana Ltd. Comprises of 1,00,000 ordinary shares of Rs. 100 each. It has no fixed interest capital. It has paid dividend of Rs. 30 per share consistently over years and each share has a current market value of Rs. 270 cum-dividend. The next dividend is due to be paid shortly. Earnings have been running at about the same level as dividends. **07**

The directors are now considering a new investment proposal, requiring an outlay of Rs. 20,00,000 which is expected to yield a net cash inflow of Rs. 4,00,000 p.a. indefinitely. All additional net cash receipts could be increase dividend payments. Three sources of finance for the new project are under consideration.

A. A reduction in the current dividend.
B. A rights issue of one new share for every ten shares held, at Rs. 200 per share, and
C. A new public issue of ordinary shares.

Assume that the broad details of the directors' plan become known in the stock market (but were not known when the share price was Rs. 270)

Estimate the new price per share:

a. If the current dividend is reduced; and
b. If the right issue is made
c. Calculate the price per share required in a new public issue if the entire surplus generated by the new project is too accurate to the existing shareholders.

Q-3

A) The stock of Box Limited performs well relative to other stocks during recessionary periods. The stock of Cox Limited, on the other hand, does well during growth periods. Both the stocks are currently selling for Rs 100 per share. You assess the rupee return (dividend plus price) of these stocks for the next year as follows: **07**

	Economic Condition			
	High Growth	Low Growth	Stagnation	Recession
Probability	0.3	0.4	0.2	0.1
Return on Box's stock	100	110	120	140
Return on Cox's stock	150	130	90	60

Calculate the expected return and standard deviation of investing:
(a) Rs 1,000 in the equity stock of Box Limited
(b) Rs 1,000 in the equity stock of Cox Limited
(c) Rs 500 each in the equity stock of Box Limited and Cox Limited.

B) The returns of two assets under four possible states of nature are given below: **07**

State of nature	Probability	Return on asset 1	Return on asset 2
1	0.10	5%	0%

2	0.30	10%	8%
3	0.50	15%	18%
4	0.10	20%	26%

a. What is the standard deviation of the return on asset 1? asset 2?
b. What is the covariance between the returns on assets 1 and 2?
c. What is the coefficient of correlation between the returns on assets 1 and 2?

OR

A) Currently the yields are stable at 7% p.a. You want to use the following two coupon-paying bonds to construct a portfolio that is immunized over an investment horizon of 2.25 years: **07**

	Coupon Rate	Maturity
Bond A	9%	2 years
Bond B	6%	4 Years

Assume both bonds make annual coupon payments and have a face value of Rs. 1000. If you are investing Rs. 3000000 in the portfolio, how many bonds each do you buy of both?

B) Consider a bond portfolio comprising of a zero-coupon bond (with 10 years maturity), 8% coupon bond and a 10% coupon bond. All have a face value of Rs.1000. The current prices of these bond are Rs.463.19, Rs.1000 and Rs.1134.20 respectively. If the yield over the next 1-year period is likely to stay at 8%, what is the current value of the portfolio and what will be the portfolio value at the end pf next year? What is individual return earned on each bond? **07**

Q-4

A) X has four alternatives. The data gathered relative to each of these alternatives is summarized in the following table: **07**

Alternative	Expected return %	Standard deviation of return %
A	20	7.00
B	22	9.50
C	19	6.00
D	16	5.50

a. Calculate the coefficient of variation for each alternative.
b. If the firm wishes to minimize risk, which alternative do you recommend? Why?

B) An investor is seeking the price to pay for a security, whose standard deviation is 3%. The correlation coefficient for the security with the market is 0.8 and the market standard deviation is 2.2%. The return from government securities is 5.2% and from the market portfolio us 9.8% The investor knows that, by calculating the required return, he can thus determine the price to pay for the security. What is the required return on the security? **07**

OR

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E252-4

	A) Consider the following information on the returns on the market portfolio and XYZ Stock.	07

Year	Market Portfolio	XYZ
1980	0.32	0.40
1981	-0.05	0.14
1982	0.21	0.28
1983	0.22	0.40
1984	0.06	-0.07
1985	0.32	0.25
1986	0.18	0.07

Assume that the risk free-rate is 8%. According to the CAPM, what should be the expected return of XYZ?

B) The following stocks are available for investment: **07**

Stock	Beta
Zicom Security	1.40
Tin Plate India	0.80
Nestle India	0.60
LKP Securities	1.80
Mirza Tanner	1.05
Zee Telefilms	0.90

a. If you invest 20% of your funds in each of the first four securities And 10% in each of the last two, what is the beta of the portfolio?
b. If the risk-free rate is 8% and the expected market return on the market portfolio is 14%, what will be the portfolio's expected return?

Q-5 **A)** Roger Binny is attempting to evaluate two possible portfolios, which consists of the same five assets but in different proportions. He is particularly interested in using beta to compare the risks of the portfolio, so he had gathered the data as shown in the table: **14**

		Portfolio	Weights
Stock	Beta	Portfolio A	Portfolio B
Essar Shipping	1.30	10	30
Clariant	0.70	30	10
Vijaya Bank	1.25	10	20
M & M	1.10	10	20
BASF	0.90	40	20

a. Calculate the betas of portfolio A & B
b. Which portfolio is riskier?
c. If Binny sells Essar shipping, which portfolio is nor riskier?
d. If Binny replaces Essar shipping with further Clariant, which portfolio is riskier?