

2025**COMMERCE****Paper : DSE-405A****(Financial Analysis)****Full Marks : 40***The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.***Module - I**Answer *any two* questions.

1. (a) What do you understand by the term 'financial analysis'? Who are the parties demanding financial statement information?
- (b) Compute index numbers and increases (decreases) in percents for both the years 2023 and 2024 by entering all missing data in the table below. Analyse and interpret any significant results revealed from such trend analysis.

Particulars	2024		2023		2022
	Index No.	Change in percent	Index No.	Change in percent	Index No.
Net Sales	119	.....	100	.....	70
Cost of Goods Sold	.....	15	100	.....	80
Gross Profit	102	.....	100	.....	75
Operating expenses	.....	(4)	100	.....	70
Earnings before Tax	.....	8	100	.....	65
Net Income	100	.....	100	.....	60

() implies negative change.

4+6

Please Turn Over**(3097)**

2. (a) Explain how Basic EPS and Diluted EPS are determined.
- (b) The following balances are extracted from the annual reports of Z Ltd. for the financial years ended 31st March, 2022, 2023, 2024 and 2025.

	(₹ '000,000)			
	2022	2023	2024	2025
Stock	230	240	220	260
Trade Receivables	180	184	190	170
Cash and Cash Equivalents	70	64	60	70
Marketable Securities	120	100	110	110
Current Liabilities	420	408	400	430

Interpret the liquidity position of Z Ltd. based on Motaal's Comprehensive Test. 3+7

3. (a) What is the significance of interest coverage ratio?
- (b) The association between working capital management and profitability of Sun Ltd. over the period 2004-2005 to 2024-2025 has been found as follows :
- Karl Pearson's correlation coefficient between inventory turnover ratio and return on assets is 0.6.
 - Karl Pearson's correlation coefficient between debtors turnover ratio and return on assets is 0.5.
 - Karl Pearson's correlation coefficient between cash turnover ratio and return on assets is (-) 0.7.

Comment on the statistical significance of the above findings considering table values of 't' at 1% level with relevant degrees of freedom as 2.861, and at 5% level as 2.093 in two tailed test. 3+7

4. The following information has been extracted from the Statement of Profit and Loss and Balance Sheet of a manufacturing company for the year ended 31st March, 2025. Prepare Cash Flow Statement of the company for the same period under indirect method and interpret the liquidity and profitability position of the firm using appropriate cash flow based ratios. 10

	Amount (₹)
Surplus in Profit and Loss Statement	10,40,000
Depreciation and Amortization Expense	14,40,000
Profit on Sale of Investments	1,60,000
Finance Costs	5,76,000
Interest Income	52,000
Dividend Income	36,000

(3)

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Taxes Paid	2,60,000
Net Cash provided by Financing activities	2,44,000
Net Cash used in Investing activities	25,52,000
Equity Share Capital (₹ 10 each)	1,20,00,000
Reserves (including Surplus for FY 24-25)	80,00,000
Changes in Current Assets (other than cash)	(4,00,000)
Changes in Current Liabilities	(8,00,000)
Current Liabilities	48,00,000
Cash and Cash Equivalents	18,60,000
Total Assets	3,46,40,000

Module - II

Answer *any two* questions.

5. (a) Briefly distinguish between Univariate Analysis and the Multivariate Analysis in the context of prediction of Corporate Financial Failure.
- (b) You have been provided with the following information and has been asked by the Finance Manager of a Financial Analysis Firm to identify the best indicator of corporate sickness :

Ratio	Cut off score
Total Debt / Total Assets Ratio	0.37
Net Income / Total Assets Ratio	0.16

You have also been provided with the following information regarding the validation sample :

	Firms	TD/TA Ratio	NI/TA Ratio	Status
Validation Sample	A	0.48	0.28	Failed
	B	0.44	0.22	Failed
	C	0.39	0.17	Non Failed
	D	0.30	0.14	Non Failed
	E	0.25	0.10	Failed

You are required to submit your opinion to the Finance Manager regarding effectiveness of these two ratios. The opinion must be supported by necessary calculations and reasons. 3+7

Please Turn Over

(3097)

6. (a) What is the zone of ignorance in Altman's original model for prediction of corporate failure? Explain its significance.
- (b) Explain, with the help of a Table, the success rate of Altman's original model in respect of prediction of corporate failure.
- (c) You are given the following Trial Balance in respect of XYZ Ltd as on 31.03.2022 :

Debit Balances	Amount (₹)	Credit Balances	Amount (₹)
Fixed Assets	60,00,000	Equity Share Capital (₹ 10)	20,00,000
Inventories	12,50,000	Reserve and Surplus	12,50,000
Sundry Debtors	17,50,000	10% Debentures	20,00,000
Cash and Bank	5,00,000	12% Term Loan	20,00,000
		Creditors for Materials	15,00,000
		Other Outstanding Expenses	7,50,000
Total	95,00,000	Total	95,00,000

You have also been provided with the following additional information :

Net Sales for the year	₹ 2,60,00,000
Dividend per share	₹ 2.50
Dividend Payout Ratio	60%
Price - Earning Ratio	11
Corporate Tax Rate	30%

Using Altman's original model, calculate Z score of XYZ Ltd. and interpret the results. 2+2+6

7. (a) "In order for the capital market to be efficient, any new information must be equally and instantaneously available and must be costless to all market participants". Identify the condition of market efficiency indicated in the above statement. Explain, in your own words, how the same can lead to market efficiency.
- (b) Mr. M, the manager of Excel Mutual Fund, wanted to investigate whether the National Stock Exchange is efficient in the semi-strong form. He decided to conduct an event study based on the rights issue announcements by companies. Accordingly, he selected three companies namely A Ltd., B Ltd. and C Ltd. (listed under NSE Nifty Index) that had made right issue announcements during the year 2024-25. He calculated the characteristic line equations based on return data for a period of three years on a weekly basis up to fourth week before announcement. The relationship between returns of the three companies with that of the benchmark i.e., Nifty 50 index are given below :

$$r_{A,t} = 1.70\% + 1.05 r_{m,t}$$

$$r_{B,t} = 1.53\% + 1.08 r_{m,t}$$

$$r_{C,t} = 1.92\% + 1.02 r_{m,t}$$

Where r_A , r_B , r_C , r_m are the respective returns of the companies and the market. The analyst considered a 7-week event window for which the following data are available :

Week	Actual Return on Company Stocks (%)			Market Return (%)
	r_A	r_B	r_C	r_m
-3	11.90	12.04	11.82	10.00
-2	13.50	13.64	13.42	11.15
-1	12.92	13.12	12.88	10.88
0	13.43	13.60	13.31	10.90
+1	12.50	12.62	12.41	10.05
+2	13.09	13.25	12.99	11.05
+3	14.51	14.72	14.37	12.15

Conduct the event study and comment on the efficiency. Approximate expected return up to 2 decimal points.

[Given, $t_{0.025} = 4.31$ and $t_{0.005} = 9.925$ for 2 d.f]

3+7

8. (a) Mr. X, a technical analyst operating in India, likely to open a portfolio consultancy firm in Singapore. In order to evaluate the level of efficiency of Singapore Stock Exchange (SGX), he has decided to conduct a serial correlation coefficient test of Straits Times Index (STI), a prominent index of the Exchange. For this purpose, he calculated daily percentage return for past 81 days. The serial correlation coefficient obtained at lag 1 from return data is found to be 0.449. Is SGX efficient in the weak form? Conclude based on serial correlation coefficient test. Critical value at 5% level is given as 2.245 for both tail test with 80 d.f and critical value at 1% level is given as 2.813 for both tail test with 80 d.f.
- (b) Describe the role of a financial analyst in an efficient market.

6+4