

PGDIFA Sem.-1 Examination

Paper-2

Techniques of Financial Analytics

February-2025

Time : 2-30 Hours]

[Max. Marks : 70

Q-1 Obtain minimum and maximum values of $f(x) = x^3 + 6x^2 - 15x + 7$ [12]

OR

Q-1 Explain various types of data in Financial Analysis and how they can be analysed.
Q-2 If demand function of a commodity is $x = 20 - 2p$, calculate the elasticity of demand when price of the commodity is . [12]

OR

Q-2 Define marginal and average Revenue. If demand function of a commodity is $x = \frac{50-p}{5}$. Find Marginal Revenue when demand is 10 units.

Q-3 Explain various methods of correlation analysis. [12]

OR

Q-3 Explain when do we use correlation in financial analysis? Calculate Spearman's Rank correlation coefficient for the following data set:

X	10	7	5	8	6	3	4	1	2	9
Y	8	7	4	10	5	1	2	3	6	7

Q-4 Explain Positive and Negative correlation. Also Calculate Pearson's Correlation coefficient for the following data: [12]

X	10	9	12	15	11	8	16	14	13
Y	8	7	6	9	8	10	14	9	5

OR

Q-4 Explain each component of simple linear regression equation. Also obtain Regression line of Y on X from the following data:

X	3	10	12	15	9	6	11
Y	5	16	14	11	8	10	6

Q-5 Following accounting information is obtained relating to Prahar Ltd, Prepare the balance sheet as on 31st March 2024. (12)

1)	Current Ratio	2.5
2)	Working Capital (Net Current Assets)	₹ 63,000
3)	Bank overdraft	₹10,000
4)	Paid up Share capital	₹ 1,80,000
5)	Fixed Assets / Shareholders' fund	0.7
6)	Stock Velocity (on the basis of COGS)	4
7)	Net Profit Ratio (to Net Capital Employed)	10%
8)	Debtors Velocity	36.5 Days
9)	Quick Ratio	1.5
10)	Gross Profit Ratio (to Sales)	20%

In Current Assets there is no assets other than stock, debtors, and cash. There are no fictitious assets and long-term debts. Closing stock is 20% higher than the opening stock.

Assume 365 days in the year and prepare Trading Accounting, Profit & Loss Accounts and Balance Sheet for the years 2023-24.

OR

Q-5 (A) Advantages and Limitation of Cash Flow Statement. (06)
(B) Advantages of Ratio Analysis (06)

(P.T.O)

Q-6

- (A) Short questions [06]
1. Explain Ordinal scale of measurement.
 2. Define elasticity of demand.
 3. Define average cost and marginal cost.
- (B) MCQ's. (TWO Marks each) (04)
1. Current Ratio Shows
 - a) Short term financial position
 - b) Financial Stability
 - c) Collection Efficiency
 - d) Higher Profitability
 2. If Opening Stock is ₹ 40,000 less than the closing stock, purchase is ₹ 6,40,000, closing stock is ₹ 2,00,000 and sales is ₹ 8,00,000 then gross profit ratio will be-
 - a) 25%
 - b) 20%
 - c) $33\frac{1}{3}\%$
 - d) None of the above
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