

Q2 Attempt any two 10 marks each

a). Distinguish between equity & debt instruments. (10 marks)

The expected cash flows of a project are as follows

Year	0	1	2	3	4	5
Cash flow	-100000	20000	30000	40000	50000	30000

$$NPV = -1,00,000 + \frac{20000}{1.12} + \frac{30000}{1.12^2} + \frac{40000}{1.12^3} + \frac{50000}{1.12^4} + \frac{30000}{1.12^5}$$

b). The cost of the capital is 12 percent. Calculate the NPV and IRR of the project (10 marks)

c). What are leverage ratios? Explain any two types of the same. (10 marks each)

Q3 Attempt any two

Financial statements of XYZ company reveals following information.

a). Balance sheet (10 marks)

	2019	Assets	2019
Liabilities		Current Assets	
Current Liabilities			

Accounts payable	60	cash and equivalents	10
Accruals (expenses)	140	Accounts Receivable	375
Notes Payable	110	Inventories	615
Total CL	310	Total CA	1000
Long Term Bonds	750	Net Fixed Assets	
Total Liabilities	1060	Plant and equipment	1000
Common equity		less depri	0
Common stock (50 million shares)	130	Other assets	0
Retained Earnings	810	Total Assets	2000
Total Common Equity	940		
Total Liabilities and equity	2000		

P & L statement

	2019
Net Sales	3000
Operating cost except depreciation and amortization	2616.2
Depreciation and Amortization	100
Total operating cost	2716.2
Operating income EBIT	283.8
less Interest	88
EBT	195.8
Less Tax (40%)	78.32
Net Income	117.48
less Retained earnings	60
Total Dividend	57.48

$$\textcircled{3} \frac{\text{Debt}}{\text{equity}} = \frac{1060}{940}$$

$$\text{equity} = \text{liability} - \text{assets}$$

$$\text{equity} = 940$$

$$\text{Debt} + \text{equity} = \text{assets}$$

$$\text{Debt} + 940 = 2000$$

$$\text{Debt} = \frac{1060}{940}$$

Find out following ratios from the given data.

- Current Ratio $\rightarrow \frac{\text{current assets}}{\text{current liabilities}} = \frac{1000}{310} =$
- Inventory Turn Over Ratio $= \frac{\text{cost of goods sold}}{\text{Average inventory}} = \frac{3000}{615} =$
- Debt - Equity Ratio.
- Net Profit Margin Ratio $= \frac{\text{Net profit}}{\text{Net sales}} =$
- Interest coverage Ratio $\rightarrow \frac{\text{Earnings before interest \& taxes}}{\text{total interest payable on debt}}$

b). Briefly explain the types of financial services

c). Differentiate between ordinary annuity and annuity due with examples.

Q4 Attempt any two 10 marks each

a). Explain various Financial Instruments in detail

b). Define risk and return. Explain Measurement of Historical Returns and Expected Returns of a Single Security and a Two-security Portfolio

c). What is Capital Budgeting? Discuss the various factors that influence the capital budgeting decisions.

$$\text{debt equity ratio} = \frac{2000 - 940}{940} = \frac{1060}{940}$$

$$\text{Net profit margin ratio} = \frac{\text{net profit}}{\text{net sales}} = \frac{117.48}{3000}$$

$$\text{Interest coverage ratio} = \frac{\text{profit before interest \& taxes}}{\text{Interest}} = \frac{283.8}{88}$$

Q-2(b)

IRR

20%

$$\frac{20000}{1.2} + \frac{30000}{1.2^2} + \frac{40000}{1.2^3} + \frac{50000}{1.2^4} = \underline{99228.4}$$

$$\text{Diff.} = 1,00,000 - 99228.4 = 771.605$$

15%

$$\frac{20000}{1.19} + \frac{30000}{1.19^2} + \frac{40000}{1.19^3} + \frac{50000}{1.19^4} = 101621$$

$$\text{Diff.} = 1621$$

$$\text{Total} = 1621 + 771 = \underline{2392}$$

$$\therefore \frac{1621}{2392} = \underline{0.68}$$

$$\therefore \boxed{\text{IRR} = 19.68\%}$$

$$\text{NPV} = -1,00,000 + \frac{20000}{1.12} + \frac{30000}{1.12^2} + \frac{40000}{1.12^3} + \frac{50000}{1.12^4} = 19042.81$$

NPV = 19042.81 (3)