CA Nitin Guru

Subject- **Financial Management - By CA NITIN GURU**

Mock Test – 7 - SOLUTIONS

Ratio Analysis; Cost of Capital; Capital Structure

Time: 1 Hour M.M. – 25 Marks

Instructions-

1. This is a self paced test series, where you can do the test anytime after you complete your chapter and attempt the test and email it to us for checking or self evaluation with help of the solution set provided. For video solutions and test paper to be checked please email us at email id provided below.
2. Answer Sheet is in a single pdf format.
3. First Sheet contains all the information- Name, Registered Email id, Registered Mobile No., Test Number with Subject, website name through which you are watching our class..
4. NO late submission will be entertained.
5. NO answer sheet will be accepted over a chat box or telegram or any other mode other than email.
6. Test solutions should be emailed to test.canitinguru@gmail.com
7. Please give us at least 10 working days time to check and send back your test copy.
8. Sir, will record test paper discussion video as well, which you can watch and clarify your doubts if you have any. Solution videos will be available on youtube and please join our telegram channel @canitinguru to be updated with any announcement about test discussion.

Solution 1. **[10 Marks]**

(i) Calculation of Closing Stock:

Cost of Goods Sold = Sales – Gross Profit (25% of Sales)
= Rs 30,00,000 – Rs 7,50,000
= Rs 22,50,000
Closing Stock= Cost of Goods Sold / Stock Turnover
= Rs 22,50,000/6 = Rs 3,75,000

(ii) Calculation of Fixed Assets:

Fixed Assets = Cost of Goods Sold / Fixed Assets Turnover
= Rs 22,50,000/1.5
= Rs 15,00,000

(iii) Calculation of Current Assets:

Current Ratio = 1.5 and Liquid Ratio = 1
Stock = 1.5 – 1 = 0.5
Current Assets = Amount of Stock × 1.5/0.5
= Rs 3,75,000 × 1.5/0.5 = Rs 11,25,000

(iv) Calculation of Debtors:

Debtors = Sales × Debtors Collection period /12
= Rs 30,00,000 × 2 /12
= Rs 5,00,000

(v) Calculation of Net Worth:

Net worth = Fixed Assets /1.2
= Rs 15,00,000/1.2 = Rs 12,50,000

Solution 2. **[10 Marks]**

Determination of Redemption value:

Higher of-

(i) The cash value of debentures = Rs 100

(ii) Value of equity shares = 5 shares × Rs 20 $(1+0.04)^5$
= 5 shares × Rs 24.333
= Rs 121.665 rounded to Rs 121.67

Rs 121.67 will be taken as redemption value as it is higher than the cash option and attractive to the investors.

Calculation of Cost of 10% Convertible debenture

(i) Using Approximation Method:

$$Kd = \frac{I(1-t) + \frac{(RV - NP)}{n}}{\frac{(RV + NP)}{2}} = \frac{10(1-0.25) + \frac{(121.67 - 100)}{5}}{\frac{(121.67 + 100)}{2}} = \frac{7.5 + 4.334}{110.835}$$

= 10.676%

(ii) Using Internal Rate of Return Method

Year	Cash flows (Rs)	Discount factor @ 10%	Present Value	Discount factor @ 15%	Present Value (Rs)
0	100	1.000	(100.00)	1.000	(100.00)
1 to 5	7.5	3.790	28.425	3.353	25.148
5	121.67	0.621	75.557	0.497	60.470

NPV			+3.982		-14.382

$$IRR = L + \frac{NPVL}{NPVL - NPVH}(H - L) = 10\% + \frac{3.982}{3.982 - (-14.382)}(15\% - 10\%)$$

= 0.11084 or 11.084% (approx.)

Solution 3. [10 Marks]

Computation of Rate of Preference Dividend

$$\frac{(EBIT - Interest)(1 - t)}{\text{No. of Equity Shares (N1)}} = \frac{EBIT(1 - t) - \text{Preference Dividend}}{\text{No. of Equity Shares (N2)}}$$

$$\frac{(Rs\ 4,80,000 - Rs\ 48,000)(1 - 0.30)}{80,00,000\ Shares} = \frac{Rs\ 4,80,000(1 - 0.30) - \text{Preference Dividend}}{80,00,000\ Shares}$$

$$\frac{Rs\ 3,02,400}{80,00,000\ Shares} = \frac{Rs\ 3,36,000 - \text{Preference Dividend}}{80,00,000\ Shares}$$

Rs 3,02,400 = Rs 3,36,000 – Preference dividend

Preference Dividend = Rs 3,36,000 - Rs 3,02,400 = Rs 33,600

$$\text{Rate of Dividend} = \frac{\text{Preference Dividend}}{\text{Preference Share Capital}} \times 100$$

$$= \frac{Rs\ 33,600}{4,00,000} \times 100 = 8.4\%$$