Practice Questions on Cost of Capital

Q1. Following is the Capital Structure of Abhyudaya Ltd.

Sources	Amount (₹)
Equity Share Capital (Rs. 10 Each)	40,00,000
12% Debentures	25,00,000
8% Preference Shares	15,00,000
Retained Earnings	20,00,000

Assuming Tax Rate @ 30%. You are required to calculate the Weighted Average Cost of Capital (WACC) based the returns given by the Equity Stock of Abhyudya Ltd. and Index over past ten years, which are as follows:

Year	Stock Return	Index Return
1	34	15
2	24	30
3	18	17
4	20	18
5	24	19
6	-10	-10
7	-15	5
8	21	23
9	15	11
10	19	12

Expected Return from Market is 15% & from Risk Free Investment is 8%.

Q2. Susheel corporation has the following book value capital structure:

Equity capital (10 million shares, Rs.10 par)	Rs.100 million
Preference capital , 11% (100000 shares, Rs.100 par)	Rs.10 million
Retained earnings	Rs.120 million
Debentures 13.5% (500000 debentures, Rs.100 par)	Rs.50 million
Term loans, 12%	Rs.80 million
	Rs.360 million

The next expected dividend per shares is Rs.1.50. The dividend per shares is expected per shares is expected to grow at the rate of 7%. The market price per shares is Rs.20.00.

Preference stock, redeemable after 10 years, is currently selling for Rs.75.00 per shares.

Debentures, redeemable after 6 years, are selling for Rs.80.00 per debenture. The tax rate for the company is 50%

(a). Calculate the cost of capital using book value proportion.

(b) Calculate the cost of capital using market value proportions.

Q3. The existing capital structure of a firm and other relevant information are given below:

Capital Structure	(Rs. Thousand)
Equity share capital (shares of Rs. 10 each)	400
General Reserve	200
9% Debenture	400

Current dividend per share is Rs. 15 and the current market price of equity share is Rs. 100. Growth rate in dividend is 10% p.a.

Corporate tax rate 40%.

Compute specific cost & WACC using book value as weights.

Q4. The capital structure of Hindustan Traders Ltd. as on 31.3.2013 is as follows:

Equity capital (20,000 shares)	Rs. 40,00,000
10% preference shares	Rs. 10,00,000
14% Debentures	Rs. 30,00,000

The shares of the company sell for Rs.20. It is expected that the company will pay next year a dividend of Rs. 2 per share which will grow at 7% forever. Assume 50 % tax rate.

a) Compute WACC based on existing capital structure.

b) Compute new WACC if the company raises an additional Rs. 20,00,000 debt by issuing 15 % debenture. This would increase the expected dividend to Rs. 3 and leave the growth rate unchanged, but price of the share will fall to Rs. 15 per share.