PRACTICAL QUESTIONS ON COMPANY ANALYSIS

1. Modern Industries Limited is a diversified company with a fairly strong position in certain segments. The financials of the company for the last five years are given below:

Rs. in crore

Income Statement Summary	**20X1**	**20X2**	**20X3**	**20X4**	**20X5**
• Net sales	560	610	630	685	744
• Profit before interest and tax	80	91	100	118	124
• Interest	20	22	23	25	27
• Profit before tax	60	69	77	93	97
• Tax	20	24	25	30	31
• Profit after tax	40	45	52	63	66
• Dividends	10	12	14	16	16
Balance Sheet Summary					
• Equity capital (Rs.5 par)	50	50	50	50	50
• Reserves and surplus	200	233	271	318	368
• Loan funds	120	130	135	140	143
• Capital employed	370	413	456	508	561
• Net fixed assets	250	270	306	343	373
• Investments	20	21	25	30	28
• Net current assets	100	122	125	135	160
• Total assets	370	413	456	508	561
• Market price per share (year end)	35	40	51	57	65

The year 20X5 has just ended. The current market price per share is Rs.65.

(a) Calculate the following for the past 2 years : return on equity, book value per share, EPS, PE ratio (prospective)
(b) Calculate the CAGR of sales and EPS for the period 20X1 - 20X5.
(c) Calculate the sustainable growth rate based on the average retention ratio and the average return on equity for the past 2 years.
(d) Decompose the ROE for the last two years in terms of five factors.
(e) Estimate the EPS for the next year (20X6) using the following assumptions: (i) Net sales will grow at 12%. (ii) PBIT / Net sales ratio will improve by 1% over its 20X5 value. (iii) Interest will increase by 8 percent over its 20X5 value. (iv) Effective tax rate will be 30 percent.
(f) Derive the PE ratio using the constant growth model. For this purpose use the following assumptions: (i) The dividend payout ratio for 20X6 will be equal to the average dividend payout ratio for the period 20X4 - 20X5. (ii) The required rate of return is estimated with the help of the CAPM (Risk-free return = 8%, Market risk premium = 8%, Beta of Modern Industries stock is 0.9). (iii) The expected growth rate in dividends is set equal to the product

of the average return on equity for the previous two years and the average retention ratio.

2. Fenix Corporation was set up fifteen years ago. After few years of initial turbulence the company found a few market segments in which it had some competitive advantage. The financials of the company for the last five years are given below:

Rs. in million

Income Statement Summary	**20X1**	**20X2**	**20X3**	**20X4**	**20X5**
• Net sales	1200	1320	1400	1510	1630
• Profit before interest and tax	180	195	201	220	242
• Interest	40	44	47	50	56
• Profit before tax	140	151	154	170	186
• Tax	40	43	45	50	54
• Profit after tax	100	108	109	120	132
• Dividends	36	40	40	42	45
• Retained earnings	64	68	69	78	87
Balance Sheet Summary					
• Equity capital (Rs.10 par)	120	120	120	120	120
• Reserves and surplus	600	668	737	815	902
• Loan funds	400	445	450	460	505
• Capital employed	1120	1233	1307	1395	1527
• Net fixed assets	728	863	870	920	982
• Investments	100	102	90	104	118
• Net current assets	292	268	347	371	427
• Total assets	1120	1233	1307	1395	1527
• Market price per share (year end)	52	50	55	62	68

The year 20X5 has just ended. The current market price per share is Rs.68. The market price per share at the beginning of 20X1 was Rs.49.

(a) What was the geometric mean return for the past 5 years ?
(b) Calculate the following for the past 2 years : return on equity, book value per share, EPS, PE ratio (prospective), market value to book value ratio.
(c) Calculate the CAGR of sales and EPS for the period 20X1 - 20X5.
(d) Calculate the sustainable growth rate based on the average retention ratio and the average return on equity for the past 2 years.
(e) Decompose the ROE for the last two years in terms of five factors.
(f) Estimate the EPS for the next year (20X6) using the following assumptions : (i) Net sales will grow at 10%. (ii) PBIT / Net sales ratio will improve by 0.5% over its 20X5 value. (iii) Interest will increase by 9 percent over its 20X5 value. (iv) Effective tax rate will be 32 percent.

(g) Derive the PE ratio using the constant growth model. For this purpose use the following assumptions: (i) The dividend payout ratio for 20X6 will be equal to the average dividend payout ratio for the period 20X4 - 20X5. (ii) The required rate of return is estimated with the help of the CAPM (Risk-free return = 7%, Market risk premium = 7%, Beta of Fenix Corporations' stock = 0.8). (iii) The expected growth rate in dividends is set equal to the product of the average return on equity and average retention ratio for the previous two years.

3. Invensys Tech Ltd was set up 25 years ago. After few years of initial turbulence the company found a few market segments in which it had some competitive advantage. The financials of the company for the last five years are given below:

Rs. in million

Income Statement Summary	**20 x 1**	**20 x 2**	**20 x 3**	**20 x 4**	**20 x 5**
• Net sales	1800	2160	2500	3010	3800
• Profit before interest & tax	540	610	625	780	1180
• Interest	108	140	150	187	290
• Profit before tax	432	470	475	593	890
• Tax	125	140	142	180	275
• Profit after tax	307	330	333	413	615
• Dividends	108	116	117	165	246
• Retained earnings	199	214	216	248	369
Balance Sheet Summary					
• Equity capital (Rs.10 par)	150	150	150	150	150
• Reserves and surplus	800	1014	1230	1478	1847
• Loan funds	200	240	250	275	325
• Capital employed	1150	1404	1630	1903	2322
• Net fixed assets	800	830	950	1170	1530
• Investments	100	110	120	135	140
• Net current assets	250	464	560	598	652
	1150	1404	1630	1903	2322
• Market price per share(year ended)	120	176	180	270	462

The year 20x5 has just ended. The current market price per share is Rs.462. The market price per share at the beginning of 20x1 was Rs.82.

(a) What was the geometric mean return for the past 5 years?

(b) Calculate the following for the past 2 years: return on equity, book value per share, EPS,PE ratio (Prospective), market value to book value ratio.

(c) Calculate the CAGR of Sales & EPS for the period 20 x 1 – 20 x 5.

(d) Calculate the sustainable growth rate based on the average retention ratio and the average return on equity for the past 2 years.

(e) Decompose the ROE for the last 2 years in term of five factors.

(f) Estimate the EPS for the next year (20 x 6) using the following assumptions.

(i) Net sales will grow at 30%

(ii) PBIT / Net sales ratio will improve by 1.5% over its 20 x 5 value.

(iii) Interest will increase by 5% over its 20 x 5 value.

(iv) Effective tax rate will be 30%.

(g) Derive the PE ratio using the constant-growth model. For this purpose use the following assumptions.

(i) The dividend pay out ratio for 20 x 6 will be equal to the average dividend pay out ratio for the period 20 x 4 – 20 x 5.

(ii) The required rate of return is estimated with the help of the CAPM (Risk free return = 7%, Market risk premium = 10%, Beta of Invensys's Stock = 1.3).

(iii) The expected growth rate in dividends is set equal to the product of the average return on equity and average retention ratio for the previous 2 years.