Q1. In April 2023, Novell, Inc. announced its plan to acquire WordPerfect Corporation. At the time of acquisition, the relevant information about the two companies was as follows:

| Particulars | Novell | WordPerfect |
| :--- | :---: | :---: |
| Revenues | $\$ 1,500$ | $\$ 800$ |
| Cost of Goods Sold (w/o depreciation) | $57 \%$ | $75 \%$ |
| Depreciation | $\$ 42$ | $\$ 25$ |
| Tax Rate | $35 \%$ | $35 \%$ |
| Capital Spending | $\$ 75$ | $\$ 40$ |
| Working Capital (as \% of Revenue) | $40 \%$ | $30 \%$ |
| Equity Beta | 1.45 | 1.25 |
| Expected Growth Rate in Revenues/EBIT | $25 \%$ | $15 \%$ |
| Expected Period of High Growth | 10 years | 10 years |
| Growth Rate after High Growth Period | $6 \%$ | $6 \%$ |
| Equity Beta after High Growth Period | 1.2 | 1.2 |

Capital Spending will be offset by depreciation after the high-growth period. Neither firm has any debt outstanding. The treasury bond rate is $7 \%$.

1) Estimate the value of Novell, operating independently. (10 marks)
2) Estimate the value of WordPerfect, operating independently. (10 marks)
3) As a result of the merger, the combined firm is expected to grow $24 \%$ a year for the high-growth period. Estimate the value of the combined firm with the higher growth and What is the value of the synergy. (10 marks)

Q2. Mags Co. is an unlisted manufacturing company whose debt-equity ratio is 1.6 and tax rate is 25 percent. There are three listed firms A, B and C, engaged in similar manufacturing business. There information are as follows:

| Company | Equity Beta | Debt Equity Ratio | Tax Rate |
| :--- | :--- | :--- | :--- |
| A | 1.1 | 1.9 | 30 percent |
| B | 1.2 | 2.1 | 25 percent |
| C | 1.05 | 1.8 | 35 percent |

What is the equity beta for Mags Co.? (10 marks)

