Q-1.

Solution: B.

The expected return is the sum of the expected dividend yield plus expected growth. The expected growth is (1-0.5)20% = 10%. The expected dividend yield is 1.5×1.1/ 25 =6.6%. The sum is 16.6%.

Q-2.

Solution: A.

The capital asset pricing model uses the firm’s equity beta, which is computed from a market model regression of the company's stock returns against market returns.

Q-3.

Solution: B.

To calculate the equity beta with asset beta known, the new debt to equity ratio to GF Company should be used.

$$\beta_{equity} = \beta^{*}_{asset}\left[1+\left(1-t^{'}\right)\frac{D^{'}}{E^{'}}\right]$$

$$\beta_{equity} = 1.25\times[1+(1-40\%)\times\frac{2}{3}] = 1.75$$

Q-4.

Solution: B.

Asset risk does not change with a higher debt-to-equity ratio. Equity risk rises with higher debt.

Q-5.

Solution: C.

GF's cost of equity is 2% × 1.5(8%-2%+3%) = 15.5%.