

HW - Chapter 9 - Dividend Policy - Q8

Price per share according to Gordon's Model is calculated as follows:

Particulars	Amount in Rs.
Net Profit	50 lakhs
Less: Preference dividend	15 lakhs
Earnings for equity shareholders	35 lakhs
Earnings per share	35 lakhs/5 lakhs = Rs. 7.00

Price per share according to Gordon's Model is calculated as follows:

$$P_0 = D_1 / (K_e - g) \text{ where } g = br$$

$$\text{Here, } E_1 = 7, K_e = 16\%$$

(i) When dividend pay-out is 25%

$$D_1 = 7 \times 0.25 = 1.75$$

$$g = br = 0.75 \times 0.2 = 0.15$$

$$P_0 = D_1 / (K_e - g) = 1.75 / (0.16 - 0.15) = \text{Rs. } 175$$

(ii) When dividend pay-out is 50%

$$D_1 = 7 \times 0.50 = \text{Rs. } 3.50$$

$$g = br = 0.50 \times 0.2 = 0.10$$

$$P_0 = D_1 / (K_e - g) = 3.50 / (0.16 - 0.1) = \text{Rs. } 58.33$$

(iii) When dividend pay-out is 100%

$$D_1 = 7 \times 1.00 = \text{Rs. } 7.00$$

$$g = br = 0 \times 0.2 = 0$$

$$P_0 = D_1 / (K_e - g) = 7.00 / (0.16 - 0.0) = \text{Rs. } 43.75$$