

BOND N: $n = 10$ YRS NOT CONVERTIBLE

PAR = \$1,000 $C = 12\%/YR$ PAY SEMI-ANNUAL

$$P = \$1,060$$

BOND C: $n = 10$ YRS CONVERTIBLE

PAR = \$1,000 $C = 8\%/YR$ PAY SEMI-ANNUAL

CONVERSION PRICE = \$25/SH.

∴ CONVERSION RATIO = $\frac{1000}{25} = 40$ SH : 1 BOND

$$\textcircled{a} i_N: 1060 = 60(PVIFA - i_N - 20) + \frac{1000}{(1+i_N)^{20}}$$

$$i_N = 5.50\% / \text{PERIOD}$$

$$\text{APR} = \underline{\underline{11\% / YR}}$$

$$\textcircled{b} \text{PREMIUM} = 3.5\%$$

$$\therefore i_C = 11 - 3.5 = 7.5\% / YR \text{ on } 3.75\% / \text{PERIOD}$$

$$P_C = 40(PVIFA - 3.75\% - 20) + \frac{1000}{(1.0375)^{20}}$$
$$= \underline{\underline{\$1,034.74}}$$

$$\textcircled{c} \text{IRR}_{4 \text{ YRS}} \quad 1034.74 = 40(PVIFA - r - 8) + \frac{40 \times 32}{(1+r)^8}$$
$$r = 6.24\% / \text{PERIOD}$$

$$\text{EAR} = (1.0624)^2 - 1 = \underline{\underline{12.87\% / YR}}$$