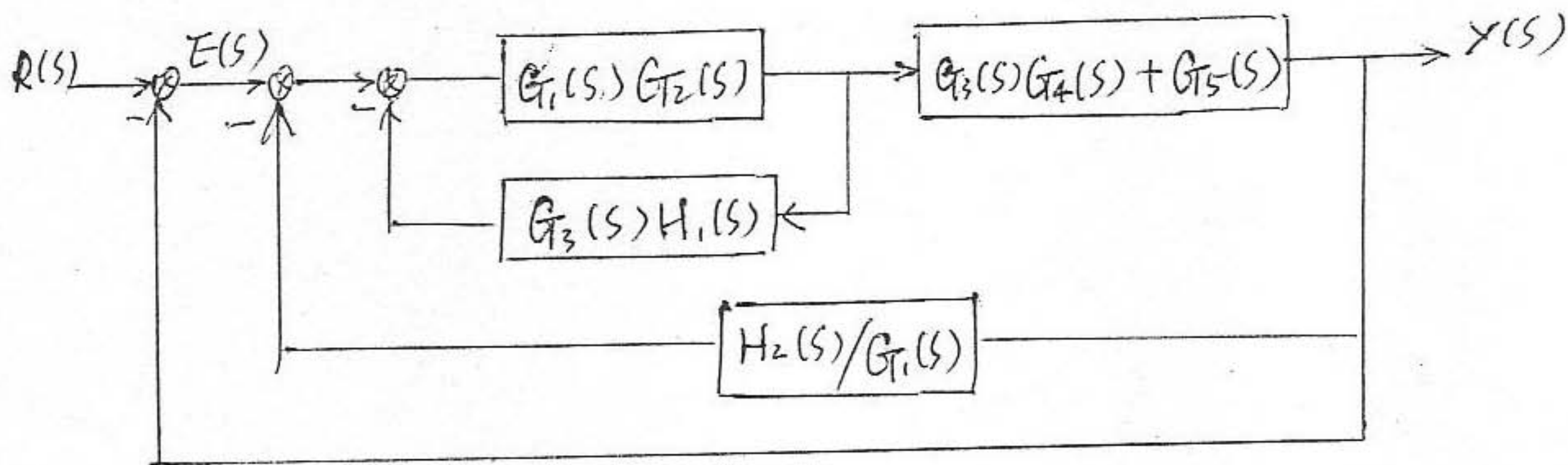


2006年硕士学位研究生入学考试试题参考答案

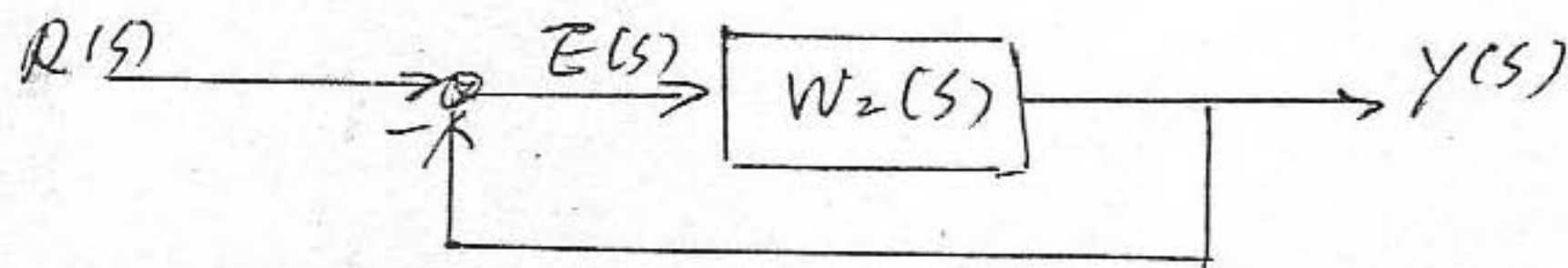
(自动控制理论)

1. $R(s) \neq 0, N(s) = 0$



$$W_1(s) = \frac{G_1(s)G_2(s)}{1 + G_1(s)G_2(s)G_3(s)H_1(s)}$$

$$W_2(s) = \frac{G_1(s)G_2(s)[G_3(s)G_4(s) + G_5(s)]}{1 + G_1(s)G_2(s)G_3(s)H_1(s) + G_2(s)G_3(s)G_4(s)H_2(s) + G_2(s)G_5(s)H_2(s)}$$



$$c. \frac{Y(s)}{R(s)} = \frac{W_2(s)}{1 + W_2(s)}$$

$$= \frac{G_1 G_2 (G_3 G_4 + G_5)}{1 + G_1 G_2 G_3 G_4 + G_2 G_3 G_5 + G_1 G_2 G_3 H_1 + G_2 G_3 G_4 H_2 + G_2 G_5 H_2}$$