GATE 2021 ECE Memory Based Questions – Grade Up

Question	Question
2x2 non singular matrix with repeated eigen values is given as {x-30 3.0 4.0} where X is a real positive number. What is the value of X - **Answer 10**	(1 2 3 5) $_x$ = (3 0 33)$_y$ What is the value of X and Y? **Answer - X = 8 & Y = 6**
V_o=? **Answer -1Volt**	The admittance parameters are - **Answer - Y_{11}=2, Y_{12}=4, Y_{21}= -1, Y_{22}=2**
P/W + W/P = 3 P^2/Q^2+Q^2/P^2= **Answer - 7**	
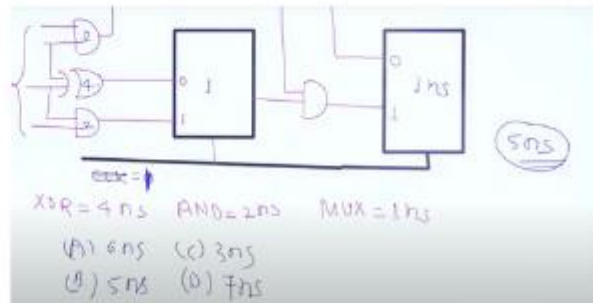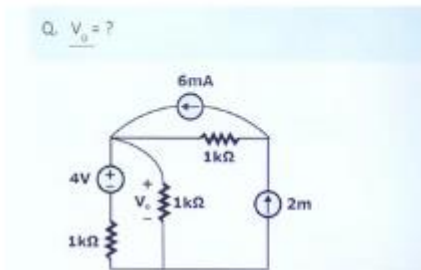
Answer – 1 VOLT   **Answer - A**

Q. Ideal operational amplifier, V_{ref} is fixed.
$V_{out} = 1V$ for $V_{in} = 0.1V$
$V_{out} = 6V$ for $V_{in} = 1V_1$
Where V_{out} is measured across R_1 connected
at the output of the operational amplifier,
the value of $R_f/R_{in} = ?$

A. 2.860
B. 3.285
C. 3.825
D. 5.555

Answer – D

Q. $T.F \dfrac{Y_{(s)}}{X_{(s)}} = ?$

Q. An asymmetrical periodic pulse train V_{in} of
10V amplitude with on $T_{on} = 1$ ms and off
time $T_{off} = 1\mu s$ in applied to the shown in
figure. The Di ideal is ideal.