

# GATE ASSIGNMENT 2

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Download latex-tikz codes from

[https://github.com/AI20BTECH11014/EE3900-Linear-Systems-and-Signal-processing/blob/main/Gate\\_Assignment\\_2/Gate\\_Assignment\\_2.tex](https://github.com/AI20BTECH11014/EE3900-Linear-Systems-and-Signal-processing/blob/main/Gate_Assignment_2/Gate_Assignment_2.tex)

1 EC 2007 Q.16

If the Laplace transform of a signal  $y(t)$  is

$$y(s) = \frac{1}{s(s-1)}$$

then its final value is

- 1) -1
- 2) 0
- 3) 1
- 4) unbounded

2 SOLUTION

$s=1$  is right s-plane pole. As the system is not lying left half of s-plane, the system is unstable. Hence, it is unbounded.  $\therefore$  option 4 is correct.