

## Experiment No. 11

**Title:** Root Locus of the given transfer function.

**Objectives:**

1. To find transfer function of system using MATLAB.
2. To visualize the root locus on  $s$ -plane

**MATLAB:**

1. Write a MATLAB program to obtain the root locus for the given transfer function.

$$GH(s) = \frac{k}{s(s+2)(s^2+2s+5)}$$

2. Write a MATLAB program to obtain the root locus for the given transfer function.

$$GH(s) = \frac{k}{(s+3)(s+4)(s^2+2s+17)}$$

**Conclusion:** (Hint: Write your interpretation from output graphs)