

Assignment II

Note

1. Answer any two full questions, choosing one full question from each part
2. Each question carries 10 marks.

Questions		COs*	RBT** Level
1	Explain the construction rules for Root Locus	CO 4	L ₁
2	For the Transfer function $G(s) = \frac{K}{s(s+1)(s+2)(s+3)}$ plot the root locus	CO 4	L ₃
3	Define Routh Herwitz criterion.	CO 4	L2
4	Explain the Concept of stability	CO 4	L1
5	Explain Necessary conditions for Stability	CO 4	L2
6	Derive the expression for condition for stability	CO 4	L2
7	Find the range of K for the characteristic equation $s^4 + 25s^3 + 15s^2 + 20s + k = 0$, using RH criteria.	CO 4	L2