Engineering Tripos Part IIB

2015

Paper 4F1: Control System Design

Answers

1. (c)(ii) $k = 4$.

   (c)(iii) Greatest upper bound on $|\delta|$ is $\frac{5}{2}$.

2. (b)(ii) A positive lower bound on ϵ is $\frac{2}{3}$.

   (b)(iv) No.

3. (a)(ii) Two right half plane poles with approximate locations $0.6 \pm j3$.

   (b) Closed-loop stable for $0.07 < k < 1.6$ (approx).