

Quiz #5
ENGR 4220/5220: Control Systems
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University of Detroit Mercy, Summer 2013

Select the best answer(s) to each of the following multiple choice questions.

1. (2 point) If the output of a system is guaranteed to not grow unbounded for any bounded input, the system is defined to be:
 - (a) asymptotically stable
 - (b) SISO stable
 - (c) BIBO stable
 - (d) MIMO stable

2. (2 point) A canonical second-order system is underdamped if which of the following are true (you may need to select multiple items):
 - (a) the poles of its transfer function are complex
 - (b) the poles of its transfer function are real
 - (c) $\zeta > 1$
 - (d) $\zeta < 1$
 - (e) $\sigma > 1$
 - (f) $\sigma < 1$