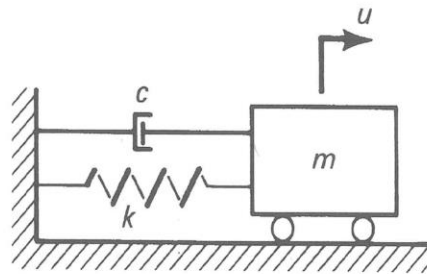
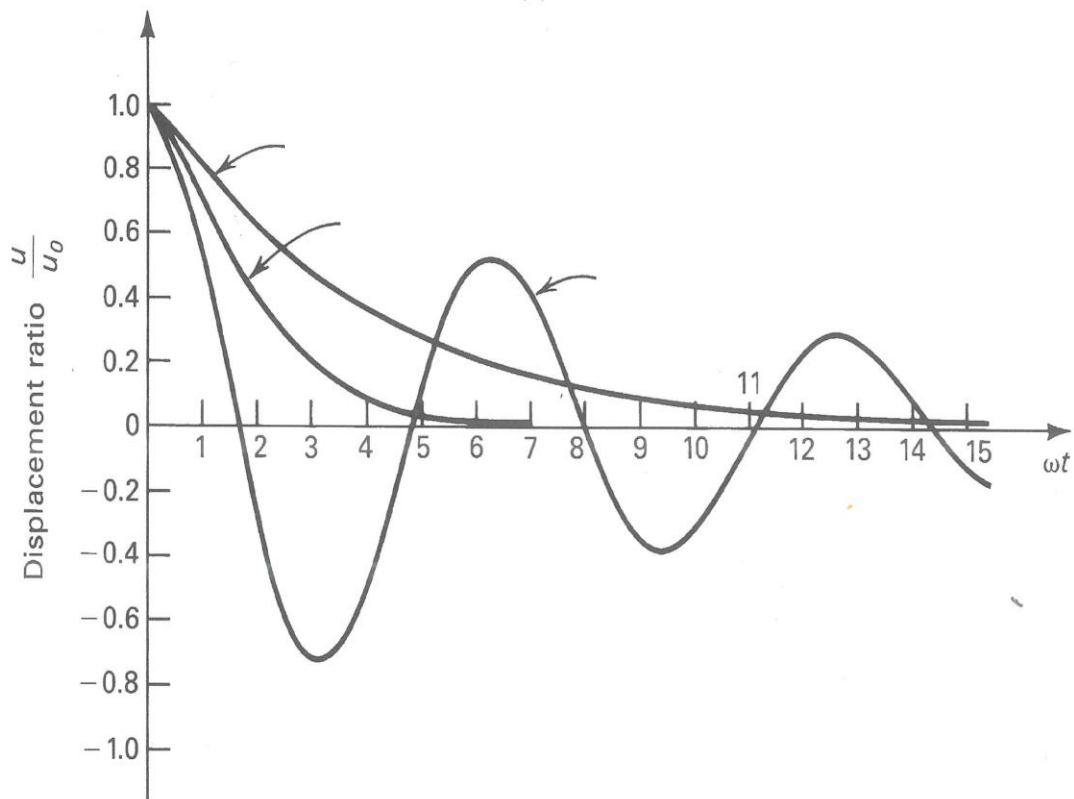


Handout #5

Free-vibration response of a damped system with different levels of damping.



(a)



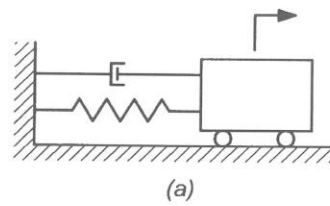
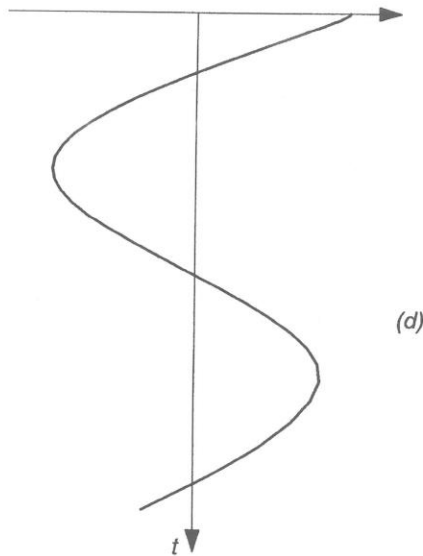
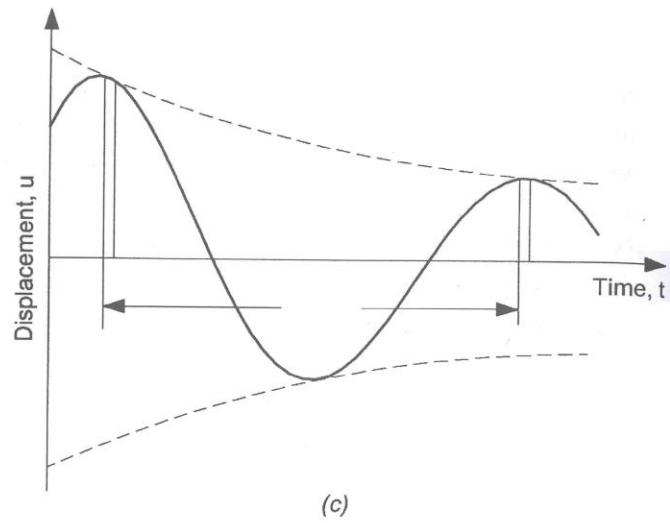
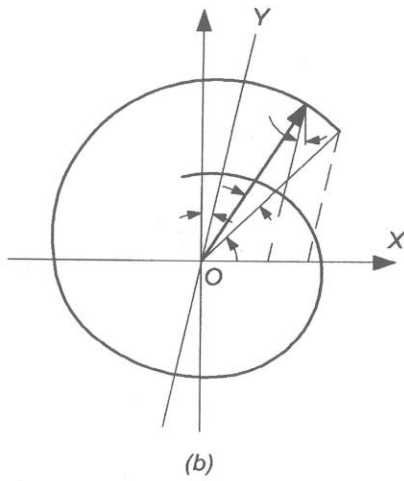
(b)

Reference:

Humar, J. L. (2012). *Dynamics of structures*. 2nd ed., ISBN 9058092453, CRC Press.

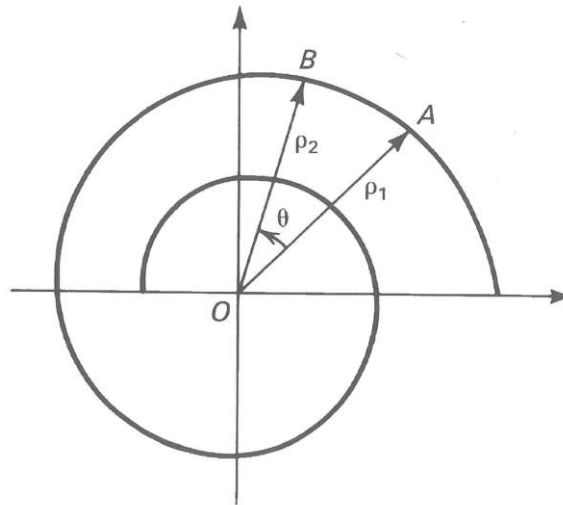
Handout #6

Free vibration a damped system.



Handout #7

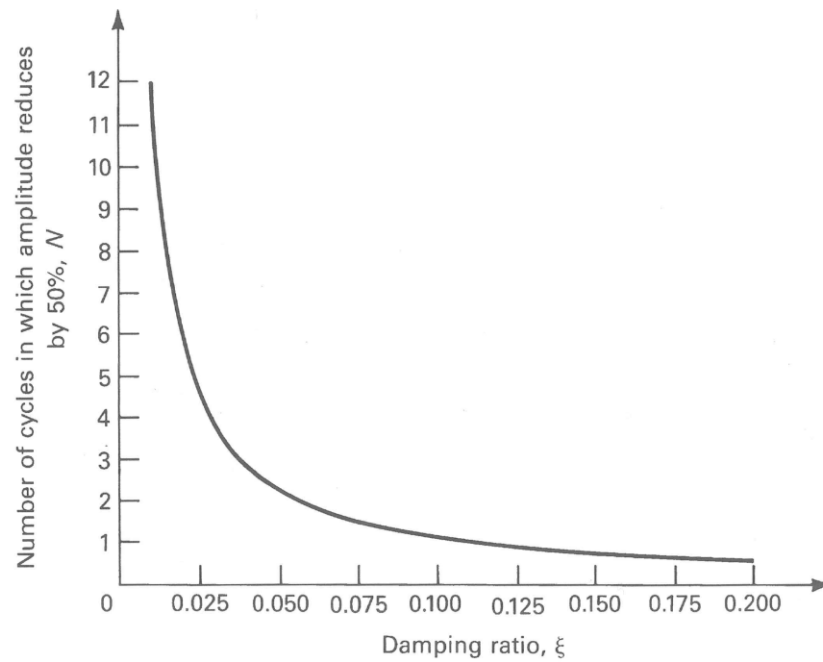
Spiral

*Reference:*

Humar, J. L. (2012). *Dynamics of structures*. 2nd ed., ISBN 9058092453, CRC Press.

Handout #8

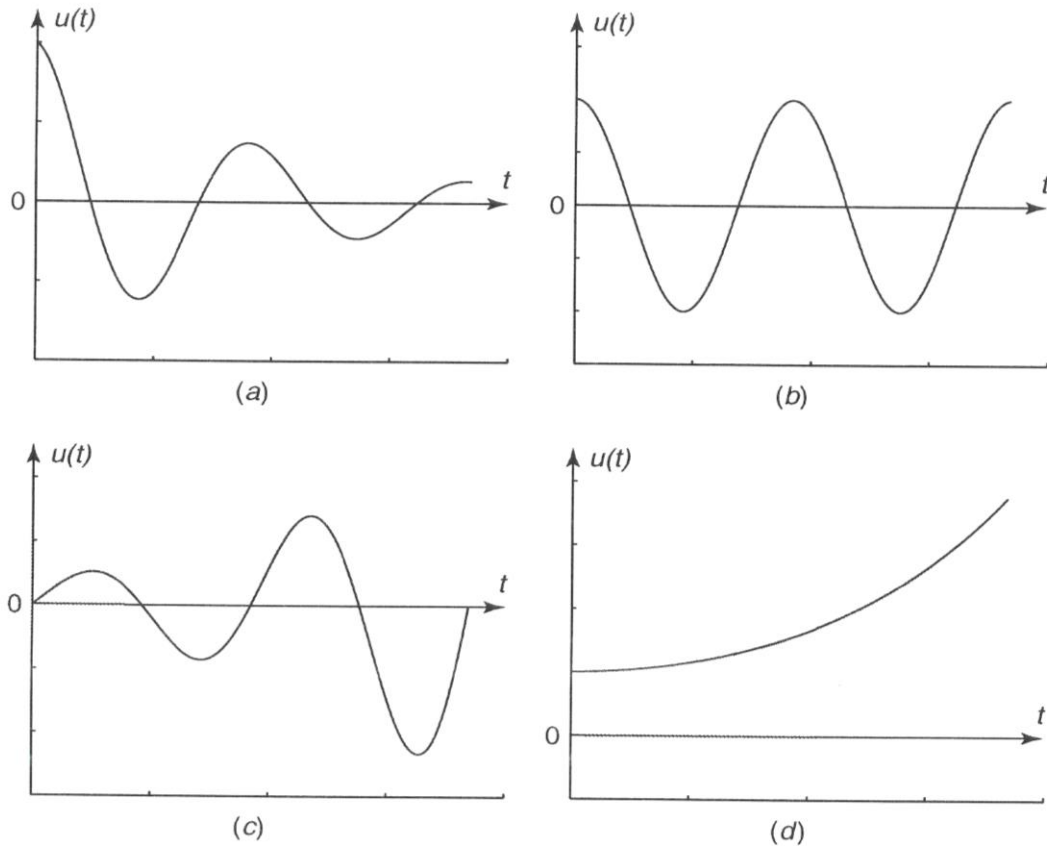
Amplitude decay versus damping.

**Reference:**

Humar, J. L. (2012). *Dynamics of structures*. 2nd ed., ISBN 9058092453, CRC Press.

Handout #9

Response of four SDOF systems.



Response of four SDOF systems: (a) underdamped (decaying) oscillation (asymptotically stable); (b) undamped (harmonic) oscillation (stable); (c) flutter (diverging, unstable); (d) nonoscillatory divergence (unstable).

Reference:

Craig Jr., R. R., Kurdila, A. J. (2006). *Fundamentals of Structural Dynamics*, 2nd ed., Wiley.