

MECH 463: ASSIGNMENT 2

Requires course text book: MECHANICAL VIBRATIONS BY S.S. RAO (4TH EDITION).
Solutions will appear approximately a week after the assignment is posted on VISTA.

Q1. Equations of Motion.

Formulate the equations of motion of the systems shown in the text book exercise problems 2.9; 2.10; and 2.14. No need to solve for the natural frequencies, yet!

Q2. Equivalent Systems.

Solve the textbook exercise problems 1.10 (1.11 in 5th edition); 1.11 (1.12 in 5th edition); and 1.29 (1.48 in 5th edition)

Q3. Equations of Motion.

Formulate the equations of motion of the rotating spring-mass system discussed in tutorial 1.

Note: Please see the TA to arrange to see the textbook in case you do not have a copy of your own.