DEPARTMENT OF CIVIL ENGINEERING



VIRTUAL SMART STRUCTURES AND DYNAMICS LAB

Experiment 3

Forced Excitation of Steel Beam using Portable Shaker

POST EXPRIMENT QUIZ QUESTIONS

- 1) Plot the time domain data in excel to visualize the free damped oscillations.
- 2) Using Matlab, covert the time domain data in the frequency domain and identify the natural frequency of the beam.
- 3) Calculate the damping ratio using Half Power Band Method.
- 4) Compare the values of damping ratio obtained experimentally and therotically.