

BMM3553: MECHANICAL VIBRATION

SEMESTER I-2017/2018

QUIZ 4

Q1 (10 MARKS)



Figure 1 shows a damped single degree freedom system with a 30-kg mass is suspended from a spring and a dashpot. The spring and dashpot have coefficient of $k=300$ N/m and $c=120$ N-s/m respectively. If a harmonic force of 1200 N at a frequency of 20 Hz applied to the mass, determined the steady state response of the system.

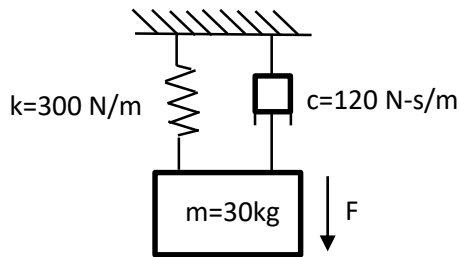


Figure 1