Series 11 (13 May 2025)

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Chapter 23 : Arterial Input Impedance

Exercise 23.1

The pressure and flow curves shown below were measured in the aorta of a man.

Calculate:

1) The input impedance Z_{in}.
2) The characteristic impedance Z_c using:
   i) the frequency domain method (namely by using Z_{in}).
   ii) the time domain method.
3) The forward and backward waves of pressure and flow. Use this analysis to justify (or not) the applicability of the time domain method for estimating Z_c.