

**The University of Calgary
Department of Mechanical Engineering**

ENME 583 Mechanical Systems in Buildings

**Winter Session 1997-98
End of Term Test, 1998 04 16 OPEN BOOK**

1. As a recent graduate of a mechanical engineering program who has completed
30% a course on mechanical systems in buildings, your employer assigns you to
 conduct a preliminary study of air quality complaints in the company's
 Calgary office building. Explain the steps you would take.

2. Your employer also delegates you to act as client representative during
25% construction of a new office building in Edmonton to ensure that the mechanical
 systems are installed properly. Explain the steps you would take.

3. At 10 metres, the noise from a compressor is 80 dB. What will the noise level be
15% at 40 metres?

4. What are the principal disadvantages and/or advantages of HVAC control
15% based on enthalpy relative to control based on sensible temperature?

5. Explain the relevance of equivalency provisions in the Alberta Building Code
15% to the mechanical engineering aspects of building. Give at least one example.