1. Why is source modulation employed in AAS?

2. A chemist attempts to determine strontium with AAS equipped with a nitrous oxide-acetylene burner, but the sensitivity associated with the 460.7 nm atomic resonance line is not satisfactory. Suggest at least 3 possibilities that might be tried to increase sensitivity.

3. Why is atomic emission more sensitive to flame instability than atomic absorption or atomic fluorescence?

4. Define in 1-2 sentences:
   (a) Zeeman effect
   (b) Spectral interferences in AAS
   (c) Chemical interferences in AAS