Name: Lecture 3: Constitutive models

**Short questions (1% each, answer not longer than 50 words + figure – equation)**

1. Explain the benefits of using no tensile strength option / tension cut-off in the Mohr-Coulomb models

2. Explain the benefits of using dilation cap in the model (the model is changing the dilation angle to zero when certain volumetric strain is reached)

3. What is the value of m parameter when the oedometric moduli are used as model parameters in the Hardening Soil Model? What assumption of volume change upon isotropic loading is used in such case?

4. What is the benefit of using the Hardening Soil Model over Mohr-Coulomb model for e.g. modelling excavations?

5. When it is recommended to use the model which takes into account small strain stiffness, e.g. Hardening Soil Model Small?