

ROCK MECHANICS GLY 364

SEMESTER TEST 2

28 October 2011

TIME: 1½ hours
ANSWER ALL THE QUESTIONS

MARKS: 100

Question 1

[10]

List the most important parameters that are usually described during a line survey and explain the importance of each parameter in determining shear strength of a discontinuity.

Question 2

[25]

Write short notes on:

- 2.1 Residual friction angle (3)
- 2.2 JCS (3)
- 2.3 GSI (4) — for rock & rock that
- 2.4 Rock mass permeability (5)
- 2.5 Rock mass deformability (10)

Question 3

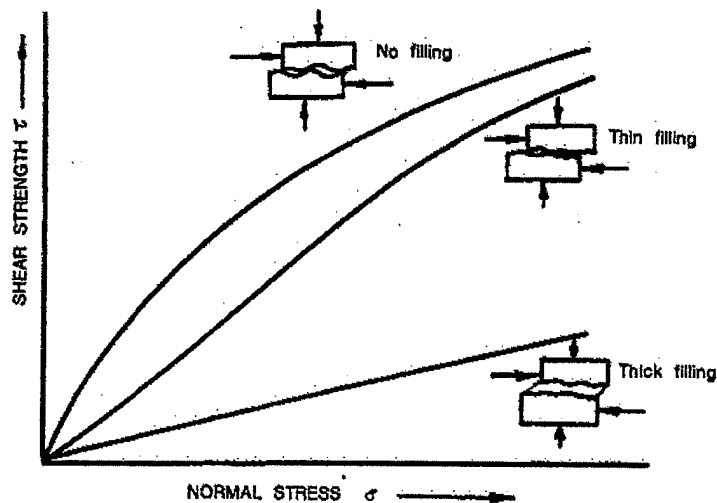
[10]

Discuss the two most important parameters that influence rock mass strength and explain how these parameters are determined.

Question 4

[15]

Discuss the three graphs shown in the diagram below.



roughness angle ϕ