

Grading:

Answering one hard question correctly = 5/5 points

Answering one hard question wrong doesn't affect your grade. Your grade follows medium and easy level questions.

Answering two medium difficulty questions correctly = 5/5 points Answering one medium difficulty question correctly = 3/5 points Answering two medium difficulty questions wrong = 1/5 points

Answering three easy difficulty questions correctly = 5/5 points Answering two easy difficulty questions correctly = 4/5 points Answering one easy difficulty questions correctly = 2/5 points Answering three easy difficulty questions wrong = 0/5 points Sample Questions:

Easy:

1. Demonstrate the use of tape measure to record the length of specified member (must use the correct resolution)

2. Calculate the mean, standard deviation and variation of the following readings obtained by the digital caliper.

Medium:

1. Demonstrate the procedure to conduct fracture toughness test using Charpy Impact

2. Calculate the modulus of toughness for the provided stress-strain curve.

Hard:

1. Explore the effect of using moist aggregate rather than dry on the mix design of concrete mix and its impact on the slump, air content and compressive strength.

2. Given the material properties provided for material A and material B, which would be most suitable for application A and application B.