

**DEPARTMENT OF CIVIL ENGINEERING**  
**ITER, SoA University**  
**Civil Engineering Materials (CVL3211)**  
**Minor Assignment Questions**

1. Define the following material behavior graphically with one example. 1) Elastic 2) Plastic 3) Viscoelastic
2. Differentiate between full annealing and normalizing.
3. Why is tempering performed on steel?
4. What do you mean by initial setting, false setting, quick set and false set of cement?
5. How does fly ash affects workability of cement?
6.  $0.15m^3$  of  $M20$  concrete with  $w/c$  ratio 0.4 and air content of 2.5% is to be formed. If specific gravities of cement, sand and aggregates are 3, 2.67 and 2.7 respectively. Find out volume of solid and air in the mix, solve volume balance equation and find out the weights of all ingredients.
7. What are the different types of tests performed on bricks?
8. Differentiate between kiln and clamp burning.
9. What is the basic difference between asphalt coat and seal?
10. Compacted asphalt concrete specimen contains 5% asphalt binder of specific gravity 1 and aggregate of specific gravity 2.68. The bulk density of specimen is  $2500kg/m^3$ . Ignore absorption and find out VTM, VMA and VFA.