

SCMS School of Engineering and Technology

Department of Civil Engineering

REPORT ON TECHNICAL TALK ON CONCRETE CONCEPTS

Date: 27th August, 2019

Venue: Seminar Hall I

Er. M.A Joseph enlightened us about the interesting and basic topics which we as civil engineers should be aware of. He walked us through different topics like properties and characteristics of cement, strength of concrete, setting time, manufacturing process and about the curing process of concrete

As an introduction he asked us about the engineering behind pressure cooker and the latest technologies in breaking system of cars. The class started off by introducing us to the different types of cement like Ordinary Portland Cement(OPC), Portland Pozzolana Cement(PPC), Portland Slag Cement (PSC),colour cement, quick setting cement etc. the mainly available cements in market are OPC, PPC and PSC. He showed us the reports that we may use as civil engineers.

Then he discussed about the strength of concrete and that it can be tested by compression test and it continued onto the topic of initial setting time and final setting time of concrete. the initial setting time of presently available concretes are one to one and half hours. the cement paste made should not be kept for long time, it should be finished using in one and half hours. the final setting time is eight to nine hours. The curing process of any concrete component should be done for 28 days. The 30%-40% strength is obtained in the 1st day, 50%-60% strength in 3 days, 70%-80% strength in 7 days and 95%-100% strength in 28th day. The most careful period of any concrete components is the 1st 10 days.

The class wined up with doubt clearing doubt session. The class was taken in a very interesting and very interactive manner.

At the end of the talk we had an understanding on the properties and characteristics of cement, setting time of concrete, the curing process of concrete, strength of concrete and how it can be tested.

