

ASSIGNMENT -1 PRESTRESSED CONCRETE DESIGN

M.M-10

Ques-1. What is the basic concept of pre-stressed concrete?

Ques2- What is the need of high strength concrete and steel?

Ques3- Advantage of pre-stressed concrete over another type of concrete?

Ques4- Compare R.C.C and P.S.C? How P.S.C is better than R.C.C?

Ques5- Describe the term shrinkage, creep, relaxation of steel stress and Stress-corrosion?

Ques6-Explain Hoyer's and Gifford system of pre-tensioning with diagram?

Ques7-Explain Magnel-Blaton system of post tensioning?

Ques8-A pre-stressed beam of size 300x500 mm is pre-stressed by 20 wires of 5 mm diameter stressed to 1500 N/mm^2 the cable is strain and provided at an eccentricity of 120 mm. the beam is simply supported over a span of 7.5 m and subjected to a L.L = 13 kN/m. calculate stresses developed at top and bottom

A) At ends

B) At mid span.