

ASSIGNMENT NO: 20

1. Three-hinged parabolic arch has a horizontal span of 36m with a central rise of 6m. A point load of 40 kN moves across the span from the left to the right. What is the absolute maximum positive bending moment that will occur in the arch?
2. A 3 hinged arch of span 40m and rise 8m carries concentrated loads of 200 kN and 150 kN at a distance of 8m and 16m from the left end and an udl of 50 kN/m on the right half of the span. Find the horizontal thrust.