

ASSIGNMENT NO: 09

1. Derive an expression for three moment equation.
2. A beam ABC of length $2L$ rests on three supports equally spaced and it's loaded with UDL w /unit length throughout the length of the beam. Draw the S.F and B.M diagrams for the beam.
3. A beam ABCD, 16 m long is continuous over three spans: $AB= 6$ m, $BC= 5$ m, $CD= 5$ m, the supports being at the same level. There is a uniformly distributed load of 20 kN/m over BC. On AB, there is a point load of 80 kN at 2 m from A. On CD, there is a point load of 60 kN at 3 m from D. Calculate the moments and reactions at the supports.